TECHNICAL REPORT PART I – SUMMATIVE ASSESSMENT

Ohio English Language Proficiency Assessment – Listening, Reading, Speaking, and Writing

Grades K-12

2019–2020 Administration

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Chapter 1. Introduction

The English Language Proficiency Assessment for the 21st Century (ELPA21) is a testing program supporting educators, member states, and members of the public as they implement the 2014 English Language Proficiency (ELP) Standards and college- and career-readiness standards. The ELPA21 Program, called the Program in this report, provides an assessment system that measures growth based on the 2014 ELP Standards and provides valuable information to inform instruction and facilitate the development of academic English proficiency so that all English learners (ELs) leave high school prepared for college and career success. The assessment system includes tests on listening, reading, speaking, and writing for students in kindergarten, grade 1, grades 2–3, grades 4–5, grades 6–8, and grades 9–12. Ohio is a member of the ELPA21 Consortium, and the assessment is called the Ohio English Language Proficiency Assessment (OELPA).

The Program conducted test development and item development for the summative ELP assessment, as part of a U.S. Department of Education grant, commencing in 2013 and running through the first operational administration of the assessment in 2016. As part of the development process, Questar Assessment, Inc., built multiple fixed-length forms for each test. Items were field tested in spring 2015, and the first operational administration of ELPA21 was in spring 2016. Following this administration, the Center for Research on Evaluation, Standards and Student Testing (CRESST) conducted item analyses, held data review meetings, and performed item calibration to obtain scoring parameters. Pacific Metrics, the organization contracted for standard setting, held a standard-setting workshop in July 2016. Based on recommendations from the workshop, the Program made decisions with respect to domain cut scores that further translated into performance levels for each grade. Cambium Assessment, Inc. (CAI), used the final item parameters, cut scores, and proficiency definitions to score and reported the test results.

Details about test development, item development, field-test form building, item data review, item calibration, and standard setting can be found in their respective reports provided by the Program or the respective supporting vendors.

In 2017, the Program introduced the ELPA21 screener. The purpose of the screener is to identify students who should qualify for English language development services. It is an assessment of a student's language proficiency in the required domains of listening, reading, writing, and speaking. The screener test questions are drawn from the same item pools and are based on the same ELP Standards as the summative assessment. Ohio first administered the screener assessment in the 2018–2019 school year.

This technical report focuses on the 2019–2020 test administration, test form reliability and validity, scoring, reporting, and quality control. This technical report has two parts.

Part I includes chapters that delineate different aspects of the 2019–2020 administration of the summative assessment, including:

- Chapter 1. Introduction
- Chapter 2. Test Administration

- Chapter 3. Scoring
- Chapter 4. Standard Setting
- Chapter 5. 2019–2020 Summary
- Chapter 6. Reliability
- Chapter 7. Validity
- Chapter 8. Reporting
- Chapter 9. Quality Control
- Appendix Part I: Analysis for Summative Assessment–2019–2020 Summary

Part II includes chapters that delineate different aspects of the 2019–2020 administration of the screener assessment, including:

- Chapter 1. Introduction
- Chapter 2. Test Administration
- Chapter 3. 2019–2020 Summary
- Chapter 4. Reliability
- Chapter 5. Validity
- Chapter 6. Reporting
- Appendix Part II: Analysis for Screener Assessment—2019–2020 Summary

Chapter 2. Test Administration

The 2019–2020 ELPA21assessments includes summative tests and screener tests. The ELPA21 screener test is used to identify students who should qualify for English language development services. Each of the summative and screener tests are administered to students in kindergarten, grade 1, grades 2–3, grades 4–5, grades 6–8, and grades 9–12. The tests for kindergarten and grade 1 are grade-specific. The tests for grades 2 and above are grade-band tests. None of the tests are timed.

Each form of both assessments involves four domain tests. Students could be exempted from as many as three domain tests.

2.1 TESTING WINDOW

The 2019–2020 testing windows were scheduled from August 5, 2019, to June 30, 2020, for the screener assessment, and from February 2 to March 27, 2020, for the summative assessment. However, in March 2020, Ohio ordered school-building closure and passed subsequent emergency legislation addressing the coronavirus (COVID-19) pandemic-related issues (House Bill 197 of the 133rd General Assembly). The Ohio General Assembly subsequently passed emergency legislation canceling the spring administration of Ohio's State Tests, including both OH ELPA summative and screener assessments¹. Therefore, both test windows were halted as of March 17, 2020, with the ordered school-building closure.

2.2 SUMMATIVE TESTS

The 2019–2020 summative assessment includes one online form, one paper form, and one braille form. Each form had separate tests for the four language domains. In addition to operational items, the online form consists of field-test (FT) items, which are embedded within each domain form. Each student took either one discrete item or the items in one entire passage in each domain. Each FT item/passage was randomly administered to students.

Table 2.1 through Table 2.3 list the number of operational items and score points in each online, paper-pencil, and braille form. The tables show that listening and reading have comparable numbers of items in each test. Writing and speaking have fewer but comparable numbers of items in each test. Table 2.4 lists the number of field-test items in the pool for each domain and grade and grade band.

¹ Section 17(A), House Bill 197, 133rd General Assembly.

						Grade/Gr	ade Band					
	к		1		2	-3	4	-5	(6–8	9	–12
Domain	Items	Score Points	ltems	Score Points	Items	Score Points	Items	Score Points	ltems	Score Points	Items	Score Points
Listening	28	28	24	24	24	26	27	30	33	36	24	27
Reading	23	23	30	30	29	34	25	27	26	31	34	35
Speaking	11	27	9	25	9	25	8	30	7	27	7	27
Writing	18	18	20	20	14	24	13	30	8	28	8	28

Table 2.1 Number of Items and Score Points—Online Summative

Table 2.2 Number of Items and Score Points—Paper Summative

Grade/Grade Band												
	l	K	1	I	2-	-3	4	-5	6-	-8	9–	·12
Domain	ltems	Score Points	Items	Score Points	ltems	Score Points	Items	Score Points	Items	Score Points	Items	Score Points
Listening	28	28	22	22	23	24	24	27	30	31	19	21
Reading	23	23	29	29	26	28	26	28	28	32	35	38
Speaking	11	27	9	25	9	25	8	30	7	27	7	27
Writing	11	18	9	16	10	20	10	27	8	28	8	28

Table 2.3 Number of Items and Score Points—Braille Summative

	Grade/Grade Band											
	٢	К		1	2	2–3	4	1–5	6	-8	9-	-12
Domain	ltems	Score Points	Items	Score Points								
Listening	17	19	21	21	20	20	23	26	22	23	19	21
Reading	13	13	22	22	23	27	23	23	25	29	34	37
Speaking	4	12	7	17	8	20	7	25	6	22	5	19
Writing	10	23	7	19	9	24	10	30	8	28	8	28

Table 2.4 Number of Field-Test Items—Online Summative

Domain	К	1	2–3	4–5	6–8	9–12
Listening	4	9	5	13	22	23
Reading	0	3	9	13	18	0
Speaking	0	8	6	0	8	5
Writing	0	9	10	7	15	10

2.3 TEST ADMINISTRATION MANUAL

2.3.1 Directions for Administration

For the 2019–2020 administrations, the Test Administration Manual (TAM) was developed to guide test administrators (TAs) in test administration for the summative test. The TAM usually includes the following key points:

- Overview of the OELPA summative assessment
- Test administrator qualifications
- Preliminary planning
- Materials required
- Administrative considerations
- Student preparation/guidance for practice tests
- Detailed instructions for preparing and administering the training tests and summative tests
- Test security instructions
- Contact information for user support

2.3.2 Training/Practice Tests

To help TAs and students familiarize themselves with the online registration system and the Test Delivery System, training or practice tests were provided before and during the testing windows. Training/practice tests can be accessed through a non-secure or CAI Secure Browser.

The summative training tests have two components, one for TAs to create and manage the training/practice test sessions and the other for students to take an actual training/practice test.

The Practice Test Administration site introduces TAs to

- logging in;
- starting a test session;
- providing the session ID to the students signing in to the TA session;
- monitoring students' progress throughout their tests; and
- stopping the test.

The *Practice Tests* site introduces students to

- signing in;
- verifying student information;
- selecting a test;
- waiting for the TA to check the test settings and approve participation;
- starting the test (adjusting the audio sound, checking the microphone for recording speaking responses, and reviewing test instructions);
- taking the test; and
- submitting the test.

2.3.3 Summative Tests

The instructions for summative tests include a brief direction for each domain test. They also provide the detailed instructions for

- logging in to the CAI Secure Browser;
- starting a test session;
- providing the session ID to the students;
- approving student test sessions, including reviewing and editing students' test settings and accommodations;
- monitoring students' progress throughout their tests by checking their testing statuses; and
- stopping the session and logging out.

Chapter 3. Scoring

For summative tests, four domain scores and two composite scores are computed. The composite scores include a comprehension score for listening and reading and an overall score that comprises all four domains.

3.1 ESTIMATING STUDENT ABILITY FOR SUMMATIVE ASSESSMENTS

OELPA reported scale scores for each domain test, the overall scores for the whole test that includes four domains, and the comprehension scores for the partial test that includes reading and listening domains. Multidimensional item response theory (MIRT) is used to estimate domain scores. The bi-factor models are used to estimate the overall and comprehension scores. The details of score estimations can be found in the *ELPA21 Scoring Specifications*.

In addition, business rules were established to specify rules about domain exemptions and attemptedness at the item, domain, and test levels. The additional scoring rules for the 2019–2020 OELPA summative tests are outlined in the following section.

3.2 SCORING RULES FOR SUMMATIVE ASSESSMENTS

The scoring rules applied to the 2019–2020 OELPA scoring include the following:

- 1. A domain test is considered attempted when a student is presented with the first operational item; it is not necessary for a student to actually respond to at least one item.
- 2. If a domain test was attempted, the items without responses in that domain should be scored as 0.
- 3. If a domain test was not attempted (no item responses in the domain) and the student was not marked as exempt in that domain, set the domain score and performance level to N (domain not-attempted).
- 4. If any domain tests are exempted before a student takes his or her first test, they should be left out of the computation of the overall scores. If the exempted domain test is reading or listening, the test should be left out of the computation of the comprehension score. In this case, set the score and performance level to E (domain exempted). However, if a test in an exempt domain is started in CAI's Test Delivery System (TDS), we will assume the test was not exempt.
- 5. If one or more of the domains is exempted and the other domains are not attempted, set the overall score to N.
- 6. For the comprehension score results, see Table 3.1 for scoring outcomes of various scenarios of exempted domains and non-attempted domains for listening and reading that contribute to the calculation of the comprehension score.

If Listening is	and Reading is	Comprehension is reported as:
Exempt	Exempt	Е
Exempt	Not Attempted	Ν
Not Attempted	Exempt	Ν
Not Attempted	Not Attempted	Ν

 Table 3.1 Scoring Outcome for the Comprehension Score

3.3 THETA TO SCALE SCORE TRANSFORMATION

The student's performance is summarized in an individual domain score for each domain, a comprehension score that includes listening and reading, and an overall score that includes all four domains. Each theta score, obtained from the MIRT scoring model, is linearly transformed to a scale score using the formula $SS = a * \theta + b$, where a is the slope and b is the intercept. As decided in the 2016 standard-setting meeting, there is one set of scaling constants for the domain scores and another set of constants for the composite scores, as shown in Table 3.2. Scale scores are rounded to an integer.

Subject	Grade	Slope (a)	Intercept (b)
Domain Scores (listening, reading, speaking, and writing)	K–12	80	550
Comprehension Scores	K–12	600	5500
Overall Scores	K–12	600	5500

Table 3.2 Scaling Constants on the Reporting Metric

3.4 LOWEST/HIGHEST OBTAINABLE SCORES

ELPA21 does not assign fixed minimum or maximum obtainable scale scores. The minimum, mean, maximum, and standard deviation of scale scores by domain and by subgroup are presented in Section 1 of the appendix.

3.5 HANDSCORING

For OELPA summative tests, all items in speaking and some items in writing are handscored. Measurement Incorporated (MI) provides all handscoring except for screeners administered in Ohio, which are scored locally. The procedure for handscoring items is provided by the ELPA21 Program. Scoring rubrics and item content are reviewed by content experts as a part of the item review meetings. A key facet of reliability is whether scoring rules are applied with fidelity during scoring sessions.

3.5.1 Rules for Handscoring

The following rules are employed to handscore items in the summative assessment:

- 1. Each response is scored by at least one rater (R1). Of all responses, 20% receive a second reading for the purpose of monitoring and maintaining sufficient inter-rater reliability (R2).
- 2. Per ELPA21 request, any second reading whose score is non-adjacent to the first reading is resolved through a third read (R3).
- 3. The final score is reported as the R1 score, unless a second reading produces a non-adjacent score, in which case the final item score is reported as the R3 score.
- 4. All responses that are identified as non-scorable and assigned a condition code are routed for verification by a team leader or scoring director.

Table 3.3 presents the non-scorable condition codes for speaking and writing items. These codes apply to both the summative and screener assessments.

Domain	Code	Description
Speaking	А	Blank
Writing	В	Technological Issue
Writing	А	Blank

Table 3.3 Non-Scorable Condition Codes for Speaking and Writing Items

The following rules are followed when evaluating a potential non-scorable response in the speaking domain:

- 1. The 0 score point responses follow the list contained in the rubric.
- 2. If no words are spoken by the student, the response is assigned a blank.
- 3. A teacher voice is not necessarily interpreted as interference; if the teacher is heard telling the student to speak but not telling them what to say, the rater scores the student's response.
- 4. A student response of, "Yes, No, I don't know," is considered a refusal and should be scored a 0.

Chapter 4. Standard Setting

For the summative assessment, the domain cut scores and the overall proficiency levels were set through a standard-setting meeting convened by the ELPA21 Program on July 19–22, 2016. Details about the standard-setting process can be found in the ELPA21 standard-setting report.

Five performance levels were established for each domain. The cut scores were set by grade, as listed in Table 4.1. The four cut scores set for each domain identify students with five performance levels, levels 1–5. If a student scores below the first cut, the student is classified in performance level 1. If a student scores at or above the first cut but below the second cut, the student is classified in performance level 2. This pattern continues for performance levels 3 and 4. If a student scores at or above the function of the student is classified in performance level 5.

Grade	Domain	Cut 1	Cut 2	Cut 3	Cut 4	Grade	Domain	Cut 1	Cut 2	Cut 3	Cut 4
	Listening	467	507	613	645		Listening	413	455	498	581
к	Reading	473	514	592	627	5	Reading	468	511	588	627
	Speaking	487	535	598	625	5	Speaking	483	526	573	607
	Writing	497	562	651	673		Writing	438	486	598	628
	Listening	435	467	549	594		Listening	410	440	498 588 573	565
1	Reading	479	515	584	629	6	Reading	461	496	565	604
I	Speaking	528	577	593	619	0	Speaking	465	511	562	595
	Writing	498	548	613	641		Writing	425	472	564	594
	Listening	408	438	512	564		Listening	430	473	553	597
2	Reading	457	489	555	595	7	Reading	486	534	609	642
2	Speaking	490	529	555	588		Speaking	475	527	582	611
	Writing	452	493	555	591		Writing	474	520	597	625
	Listening	409	448	536	598		Listening	432	478	565	613
3	Reading	495	541	610	644	8	Reading	494	547	640	669
3	Speaking	500	538	572	612	0	Speaking	476	528	590	619
	Writing	498	542	603	636		Writing	484	533	619	647
	Listening	398	431	492	563		Listening	451	491	571	613
4	Reading	453	488	550	594	9–12	Reading	488	539	631	662
4	Speaking	462	506	544	584	9-12	Speaking	481	536	593	619
	Writing	437	481	568	600		Writing	485	533	615	641

Table 4.1 ELPA21 Domain Cut Scores by Grade

Overall proficiency, defined as "proficiency determination," for a given student is established on the basis of a profile of domain performance levels across all four tested domains. There are three proficiency determination levels: Emerging, Progressing, and Proficient. The following rules determine a student's overall proficiency (note that for the purpose of assigning overall proficiency, nonexempt domains that not attempted are treated as performance level 1):

- Students whose domain performance levels are 1 or 2 across all nonexempt domains are identified as Emerging.
- Students whose domain performance levels are 4 or 5 across all nonexempt domains are identified as Proficient. Students cannot be proficient if any domains are untested in the absence of a valid exemption or Invalidation.
- Students with domain performance levels that do not fit with Emerging or Proficient (as defined above) are identified as Progressing.

See details in the Appendix B (Overall Proficiency Determination Look-up Tables) in the ELPA21 Scoring Specification: School Year 2019-2020.

Chapter 5. 2019–2020 Summary

The 2019–2020 student participation and performance statistics for OELPA summative assessment are presented in this chapter and in Sections 1–3 of the appendix. The figures and tables included in Sections 1–3 are listed below:

- Section 1. Summative Assessment—Scale Score Summary
 - Tables S1.1–S1.13 present the number of students; the minimum, maximum, average, and standard deviation of domain, overall, and comprehension scores by subgroups in each grade (K–12).
- Section 2. Summative Assessment—Percentage of Students by Domain Performance Level
 - Tables S2.1–S2.13 show the total number of students taking each domain test and the percentage of students in each performance level by domain test and by subgroups.
- Section 3. Summative Assessment—Percentage of Students by Overall Proficiency Level
 - Tables S3.1–S3.13 show the total number of students who are categorized in each of the overall proficiency levels, by subgroup: Emerging, Progressing, or Proficient.

5.1 2019–2020 STUDENT PARTICIPATION

Table 5.1 summarizes student participation in each mode of testing. Five students tested with braille forms, 258 students tested with paper-pencil forms, and all other students tested with online forms.

Table 5.2 shows student participation overall and by subgroups. It shows the number of students in each subgroup who took a particular test. Generally, the number of students who participate in the 2019–2020 OELPA administration decreases as the grade level increases, with some fluctuation at grades 9 and 10. More male students than female students take the test. By test, the greatest number of students are in the Hispanic or Latino group (26.8%–35.8%), followed by African American students (18.3%–24.3%) and Asian students (14.1%–24.9%). About 0.2%–0.7% of the students have migrated to the United States from other countries. The percentage of students who have individualized education programs (IEPs) increased from 5.1% to 19.5% between kindergarten and middle school, and it dropped to 14.3% in high school. Between kindergarten and middle school, the percentages of students with disabilities increased from 4.8% to 19.4% and dropped to 14.4% in high school. Most students identified as having a specific learning disability are in upper grades, including: 4.5% in grade band 2–3, 11.4% in grade band 4–5, 12% in middle school, and 8.8% in high school.

	T . 4 . 1	Braill	e	Onli	ne	Paper-F	Pencil
Grade	Total –	N	%	N	%	N	%
к	10,123	1	0.01	10,067	99.45	55	0.54
1	8,802	0	0.00	8,737	99.26	65	0.74
2	7,322	0	0.00	7,258	99.13	64	0.87
3	5,853	0	0.00	5,835	99.69	18	0.31
4	4,419	0	0.00	4,403	99.64	16	0.36
5	3,994	0	0.00	3,988	99.85	6	0.15
6	3,365	0	0.00	3,358	99.79	7	0.21
7	3,253	0	0.00	3,249	99.88	4	0.12
8	3,382	1	0.03	3,373	99.73	8	0.24
9	4,293	1	0.02	4,287	99.86	5	0.12
10	3,674	1	0.03	3,670	99.89	3	0.08
11	2,997	1	0.03	2,991	99.80	5	0.17
12	2,247	0	0.00	2,245	99.91	2	0.09
Total	63,724	5	0.01	63,461	99.59	258	0.40

Table 5.1 Student Participation by Test Mode

Quibarrour	Ctotus	K		1		2-3		4-5		6-8		9-12	2
Subgroup	Status	N	%	N	%	N	%	N	%	N	%	N	%
Total		10,123	100.0	8,802	100.0	13,175	100.0	8,413	100.0	10,000	100.0	13,211	100.0
	к	10,123	100.0										
	1			8,802	100.0								
	2					7,322	55.6						
	3					5,853	44.4						
	4							4,419	52.5				
	5							3,994	47.5				
Grade	6									3,365	33.7		
	7									3,253	32.5		
	8									3,382	33.8		
	9											4,293	32.5
	10											3,674	27.8
	11											2,997	22.7
	12											2,247	17.0
	Female	4,821	47.6	4,170	47.4	5,948	45.1	3,749	44.6	4,337	43.4	5,812	44.0
Gender	Male	5,110	50.5	4,512	51.3	7,106	53.9	4,558	54.2	5,582	55.8	7,308	55.3
	Missing	192	1.9	120	1.4	121	0.9	106	1.3	81	0.8	91	0.7
	American Indian or Alaskan Native	19	0.2	29	0.3	28	0.2	19	0.2	19	0.2	23	0.2
	Asian	2,519	24.9	2,028	23.0	2,475	18.8	1,246	14.8	1,412	14.1	2,157	16.3
Ethnicity	Black or African American	1,904	18.8	1,610	18.3	2,622	19.9	1,626	19.3	2,060	20.6	3,207	24.3
	Hispanic or Latino	2,715	26.8	2,550	29.0	4,166	31.6	3,010	35.8	3,533	35.3	4,243	32.1

Table 5.2 Student Participation by Subgroups in Each Test

0	04-4	K		1		2-3		4-5		6-8		9-12	2
Subgroup	Status -	Ν	%	N	%	N	%	N	%	N	%	N	%
	Native Hawaiian or Other Pacific Islander	48	0.5	55	0.6	95	0.7	61	0.7	79	0.8	69	0.5
	Two or More Races	1,269	12.5	1,090	12.4	1,843	14.0	1,316	15.6	1,625	16.3	1,990	15.1
	White	1,618	16.0	1,410	16.0	1,916	14.5	1,119	13.3	1,257	12.6	1,491	11.3
	Other/Unknown	31	0.3	30	0.3	30	0.2	16	0.2	15	0.2	31	0.2
	Gifted	2	0.0	23	0.3	67	0.5	34	0.4	24	0.2	16	0.1
Other	Home Schooled					1	0.0			1	0.0		
Other	IEP	516	5.1	612	7.0	1,422	10.8	1,651	19.6	1,954	19.5	1,892	14.3
	Migrant	18	0.2	22	0.2	50	0.4	36	0.4	44	0.4	86	0.7
	Autism	124	1.2	122	1.4	190	1.4	144	1.7	107	1.1	83	0.6
	Deaf-blindness							1	0.0			3	0.0
	Developmental delay	9	0.1	3	0.0	10	0.1	13	0.2	16	0.2	27	0.2
	Emotional disturbance	7	0.1	14	0.2	27	0.2	27	0.3	40	0.4	40	0.3
	Hearing Impaired	4	0.0	9	0.1	18	0.1	17	0.2	20	0.2	29	0.2
Primary Disability	Intellectual Disability	25	0.2	33	0.4	82	0.6	116	1.4	174	1.7	179	1.4
	Multiple disabilities	21	0.2	27	0.3	69	0.5	61	0.7	77	0.8	82	0.6
	Orthopedic impairment	10	0.1	13	0.1	11	0.1	11	0.1	8	0.1	7	0.1
	Other health impairment	41	0.4	68	0.8	188	1.4	205	2.4	257	2.6	237	1.8
	Specific learning disability	35	0.3	86	1.0	589	4.5	958	11.4	1,200	12.0	1,157	8.8
	Speech or language impairment	226	2.2	229	2.6	240	1.8	82	1.0	32	0.3	20	0.2

Subaroun	Status	К		1		2-3	3	4-5		6-8	;	9-1	2
Subgroup		N	%	Ν	%	N	%	N	%	N	%	N	%
	Traumatic brain injury	1	0.0	1	0.0	4	0.0	9	0.1	15	0.2	15	0.1
	Visual impairment	5	0.0	2	0.0	3	0.0	7	0.1	7	0.1	12	0.1

5.2 2019–2020 Student Scale Score and Performance Summary

Student performance in the 2019–2020 OELPA administration is summarized for the entire population and by subgroup. Table 5.3 shows the number and percentage of students who had domain exemption or not-attempted in each domain and grade. Table 5.4–Table 5.6 show the number of students; minimum, maximum, mean and standard deviation of scale scores in each grade and domain. The tests are not vertically linked across all grades. Scale scores can be compared only within grade-band tests (2–3, 4–5, 6–8, and 9–12). In general, the mean scale scores increase as grades increase within each grade band. A disaggregated summary based on gender, ethnicity, and other subgroups is also available in Section 1 of Appendix Part I.

Table 5.7 and Table 5.8 display the percentage of students in each performance level in each grade and domain (see Section 2 of Appendix Part I for a disaggregated summary). In addition, Table 5.9 shows the percentage of student in each overall proficiency level in each grade. The percentages of students by performance level in each domain test and by overall proficiency level are also plotted in Figure 5.1 and 5.2, respectively. Section 3 of Appendix Part I displays the percentage of students by proficiency level by gender, ethnicity, and other subgroups.

For both reading and writing, Figure 5.1 shows that most students are in performance level 3 except for kindergarten writing and grade 9 reading tests. In listening, speaking, and writing, the percentages of students in performance level 4 increase between kindergarten and grade 2 or grade 3, remain stable up to grade 6, drop up to grade 9, and slightly increase again up to grade 11. More middle school and high school students earned performance level 1 or 2 than performance level 4 or 5 in reading and writing, while more grade 2 to grade 8 students earned performance level 4 or 5 than performance level 1 or 2 in listening and speaking.

Figure 5.2 shows that most students are in the Progressing category in all grades (63.6% to 77.3%). The percentage of students who are proficient increases from kindergarten to grade 4 (with a slight drop in grade 3), then consistently decreases until grade 9, and slightly increases after grade 9. The percentage of students in the Emerging category is relatively stable until grade 6, increases until grade 9, and then consistently drops afterwards.

		Liste	ening	Rea	ding	Spea	ıking	Wri	ting
Grade	Total	Exempted	Not Attempted	Exempted	Not Attempted	Exempted	Not Attempted	Exempted	Not Attempted
к	10,123	2 (0.0%)	69 (0.7%)	39 (0.4%)	159 (1.6%)	39 (0.4%)	326 (3.2%)	43 (0.4%)	181 (1.8%)
1	8,802	4 (0.0%)	75 (0.9%)	63 (0.7%)	111 (1.3%)	61 (0.7%)	207 (2.4%)	63 (0.7%)	155 (1.8%)
2	7,322	3 (0.0%)	72 (1.0%)	71 (1.0%)	123 (1.7%)	63 (0.9%)	258 (3.5%)	64 (0.9%)	177 (2.4%)
3	5,853	4 (0.1%)	35 (0.6%)	79 (1.3%)	48 (0.8%)	64 (1.1%)	146 (2.5%)	75 (1.3%)	77 (1.3%)
4	4,419	4 (0.1%)	32 (0.7%)	73 (1.7%)	58 (1.3%)	50 (1.1%)	127 (2.9%)	68 (1.5%)	87 (2.0%)
5	3,994	7 (0.2%)	36 (0.9%)	94 (2.4%)	71 (1.8%)	69 (1.7%)	124 (3.1%)	88 (2.2%)	107 (2.7%)
6	3,365	3 (0.1%)	19 (0.6%)	68 (2.0%)	50 (1.5%)	42 (1.2%)	113 (3.4%)	60 (1.8%)	70 (2.1%)

Table 5.3 Summary of Domain Exemptions and Non-Attempted

		Liste	ening	Rea	ding	Spea	iking	Writing	
Grade	Total	Exempted	Not Attempted	Exempted	Not Attempted	Exempted	Not Attempted	Exempted	Not Attempted
7	3,253	4 (0.1%)	25 (0.8%)	35 (1.1%)	49 (1.5%)	28 (0.9%)	128 (3.9%)	30 (0.9%)	92 (2.8%)
8	3,382	8 (0.2%)	25 (0.7%)	51 (1.5%)	64 (1.9%)	27 (0.8%)	133 (3.9%)	45 (1.3%)	83 (2.5%)
9	4,293	14 (0.3%)	122 (2.8%)	29 (0.7%)	115 (2.7%)	23 (0.5%)	175 (4.1%)	35 (0.8%)	148 (3.4%)
10	3,674	7 (0.2%)	94 (2.6%)	43 (1.2%)	100 (2.7%)	27 (0.7%)	172 (4.7%)	41 (1.1%)	117 (3.2%)
11	2,997	11 (0.4%)	59 (2.0%)	27 (0.9%)	74 (2.5%)	22 (0.7%)	143 (4.8%)	26 (0.9%)	91 (3.0%)
12	2,247	2 (0.1%)	42 (1.9%)	21 (0.9%)	55 (2.4%)	15 (0.7%)	85 (3.8%)	20 (0.9%)	64 (2.8%)

* Proficiency Not Attempted is excluded.

		L	istening					Reading		
Grade	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
к	10,052	237	561.6	775	78.3	9,925	247	561.6	770	77.4
1	8,723	239	559.1	712	72.8	8,628	241	554.6	744	79.3
2	7,247	272	525.2	726	65.8	7,128	260	525.0	744	66.9
3	5,814	229	547.2	742	71.9	5,726	228	554.7	766	72.1
4	4,383	213	526.8	717	76.4	4,288	228	523.6	719	68.7
5	3,951	213	538.1	718	82.6	3,829	228	539.9	719	73.4
6	3,343	232	520.7	721	72.0	3,247	247	522.1	743	63.8
7	3,224	261	526.2	723	78.1	3,169	263	529.5	736	69.1
8	3,349	232	546.2	755	85.1	3,267	247	551.5	780	77.7
9	4,157	253	520.7	762	78.5	4,149	258	520.8	777	71.0
10	3,573	310	537.5	736	76.0	3,531	318	537.8	742	70.7
11	2,927	289	549.8	741	71.2	2,896	325	547.4	755	68.9
12	2,203	253	554.4	809	71.4	2,171	258	551.9	817	70.1

Table 5.4 Scale Score Summary–Listening and Reading

* Domains with Exemption or Not Attempted are excluded. * Scale scores cannot be compared across grade bands.

Crede		S	Speaking			_		Writing		
Grade	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
к	9,758	291	587.2	756	82.6	9,899	309	543.7	723	78.7
1	8,534	265	584.7	736	71.4	8,584	245	552.7	733	82.3
2	7,001	267	550.4	735	70.8	7,081	267	523.4	723	69.5
3	5,643	252	573.7	747	75.3	5,701	235	554.1	765	72.6
4	4,242	237	547.0	723	78.8	4,264	221	519.9	722	75.4
5	3,801	237	557.3	742	82.5	3,799	221	536.5	724	79.5
6	3,210	268	550.7	745	72.9	3,235	243	514.4	725	72.3
7	3,097	278	551.5	739	81.1	3,131	260	521.7	748	80.9
8	3,222	268	567.8	766	83.3	3,254	243	542.1	776	86.7
9	4,095	297	545.4	723	78.2	4,110	263	511.8	749	81.1
10	3,475	329	563.0	719	69.4	3,516	326	531.3	729	74.7
11	2,832	324	574.7	735	64.3	2,880	292	543.1	712	69.7
12	2,147	297	580.6	770	61.3	2,163	263	546.8	808	67.3

* Domains with Exemption or Not Attempted are excluded. * Scale scores cannot be compared across grade bands.

		Corr	prehens	ion				Overall		
Grade	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
к	10,090	3377	5560.2	6865	552.8	10,123	3185	5600.5	7178	581.1
1	8,758	3428	5538.4	6640	512.9	8,802	3021	5604.5	6998	582.9
2	7,282	3659	5306.3	6729	475.6	7,322	3294	5337.0	6977	526.7
3	5,837	3300	5488.1	6729	522.7	5,853	2968	5548.4	7156	571.7
4	4,402	3298	5317.0	6878	531.1	4,419	2892	5326.3	6800	582.8
5	3,965	3298	5411.3	6878	581.0	3,994	2892	5428.9	6774	626.7
6	3,358	3361	5286.8	6938	501.0	3,365	3052	5308.3	6932	546.7
7	3,238	3480	5334.6	6824	534.8	3,253	3171	5354.4	6865	601.3
8	3,366	3361	5489.2	6938	598.5	3,382	3052	5509.8	7242	648.7
9	4,221	3505	5295.9	7177	545.2	4,293	3235	5302.1	7064	598.4
10	3,617	3794	5411.8	7148	550.0	3,674	3696	5439.2	6900	562.9
11	2,957	3794	5490.6	7177	530.8	2,997	3568	5529.8	6981	529.4
12	2,223	3505	5528.6	7177	544.6	2,247	3235	5570.0	7483	521.2

Table 5.6 Scale Score Summary–Comprehension and Overall

* Scale scores cannot be compared across grade bands.

Orreale			Listen	ing					Readi	ing		
Grade	N	1	2	3	4	5	Ν	1	2	3	4	5
к	10,052	11.8	13.1	48.3	11.5	15.2	9,925	13.3	14.0	36.7	14.8	21.2
1	8,723	5.8	6.2	28.1	25.4	34.5	8,628	18.4	16.8	30.1	14.1	20.5
2	7,247	6.2	4.3	25.8	34.5	29.3	7,128	17.6	14.6	31.7	20.0	16.1
3	5,814	6.5	3.9	24.5	41.0	24.1	5,726	21.4	15.1	39.4	15.5	8.6
4	4,383	7.6	5.7	14.9	35.3	36.4	4,288	18.0	12.6	31.0	22.0	16.5
5	3,951	10.5	7.0	10.1	37.6	34.9	3,829	18.7	14.7	37.6	17.0	12.0
6	3,343	8.9	6.8	18.4	35.4	30.5	3,247	17.8	17.9	38.1	15.2	11.1
7	3,224	15.5	8.7	32.9	23.8	19.1	3,169	27.5	24.3	34.4	9.0	4.8
8	3,349	13.9	9.2	27.7	24.7	24.5	3,267	26.8	19.3	39.9	8.4	5.6
9	4,157	23.5	12.5	33.4	17.9	12.7	4,149	35.9	24.1	33.4	4.0	2.7
10	3,573	15.6	13.2	33.2	20.0	18.0	3,531	28.2	22.7	38.1	6.5	4.6
11	2,927	9.8	11.3	37.1	20.7	21.0	2,896	20.9	26.7	39.2	7.8	5.4
12	2,203	8.7	10.7	35.9	21.4	23.3	2,171	20.0	25.2	39.4	9.0	6.4

Table 5.7 Percentage of Students by Performance Level–Listening and Reading

* Domains with Exemption or Not Attempted are excluded.

Table 5.8 Percentage of Students by Performance Level–Speaking and Writing

Orreale			Speak	ing					Writi	ng		
Grade	N	1	2	3	4	5	N	1	2	3	4	5
к	9,758	11.8	9.7	26.2	16.0	36.3	9,899	34.2	25.8	27.9	4.9	7.2
1	8,534	16.4	22.2	10.2	18.3	32.9	8,584	23.4	20.5	32.3	9.6	14.2
2	7,001	14.7	15.9	15.8	22.6	31.0	7,081	16.1	14.7	33.0	19.9	16.3
3	5,643	12.7	9.8	15.9	28.8	32.8	5,701	20.0	15.5	37.4	17.7	9.4
4	4,242	13.4	8.7	14.5	26.9	36.4	4,264	15.7	10.2	46.2	15.9	12.1
5	3,801	15.6	9.4	22.1	24.1	28.7	3,799	13.3	9.7	54.8	12.1	10.2
6	3,210	12.8	9.7	26.2	23.1	28.2	3,235	12.8	10.4	52.0	14.2	10.7
7	3,097	16.5	11.5	30.6	19.4	22.1	3,131	23.4	17.2	43.4	9.4	6.5
8	3,222	14.9	10.0	27.2	18.9	29.1	3,254	22.5	16.3	42.8	10.0	8.4
9	4,095	20.1	16.3	32.6	15.4	15.6	4,110	32.5	20.5	39.5	5.3	2.2
10	3,475	12.1	16.8	34.1	15.5	21.4	3,516	25.3	20.7	42.0	7.4	4.6
11	2,832	8.0	14.0	34.2	18.6	25.2	2,880	18.0	22.0	45.8	8.1	6.0
12	2,147	6.1	12.9	33.9	19.2	27.8	2,163	16.3	22.1	45.5	9.8	6.3

* Domains with Exemption or Not Attempted are excluded.

Grade	N	Emerging	Progressing	Proficient
К	10,123	14.2	77.3	8.6
1	8,802	9.3	71.0	19.7
2	7,322	10.0	63.8	26.1
3	5,853	10.4	70.6	19.0
4	4,419	12.9	63.6	23.6
5	3,994	16.4	65.8	17.8
6	3,365	13.8	69.7	16.4
7	3,253	21.1	70.2	8.7
8	3,382	20.5	69.4	10.1
9	4,293	31.6	64.3	4.1
10	3,674	24.4	68.6	7.0
11	2,997	16.9	74.4	8.7
12	2,247	14.1	76.0	9.9

Table 5.9 Percentage of Students by Overall Proficiency Level

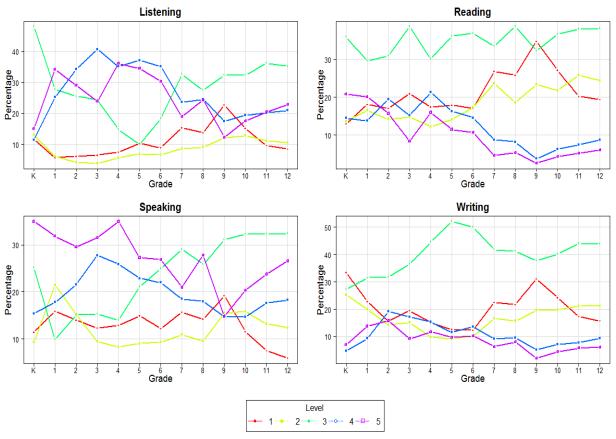


Figure 5.1 Percentage of Students in Performance Levels

* Domains with Exemption or Not Attempted are excluded.

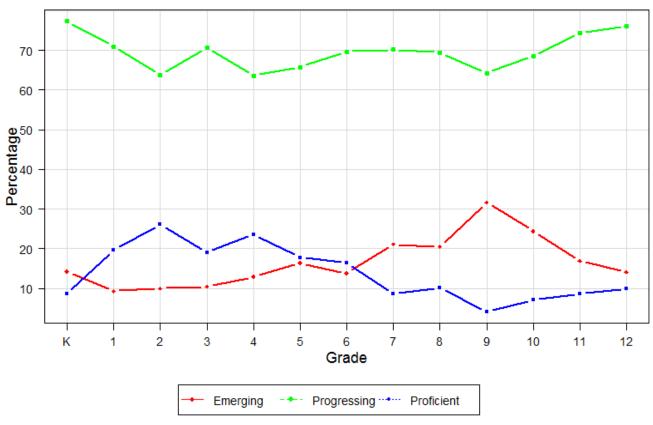


Figure 5.2 Percentage of Students in Proficiency Levels

* Proficiency Not Attempted is excluded.

5.3 2019–2020 Testing Time for Online Tests

Table 5.10 shows testing time per each grade or grade band. In general, higher-grade tests showed longer testing time than the lower grade. Testing time was computed based on page time for each item, which indicates the time a student spent on each item. The sum of the page time was used for testing time. In this analysis, only students who took online tests and had valid scores on all items were included.

Grade/Grade Band	N	N of	Testing Time (Minutes)								
		Items	Min	P10	P25	P50	Mean	P75	P90	Max	SD
К	9,550	94	10.7	40.7	47.1	56.6	60.0	69.0	83.4	209.9	18.2
1	8,334	86	6.0	43.0	49.0	57.6	60.8	69.0	82.2	191.8	17.1
2-3	12,344	78	10.2	54.2	64.1	77.5	82.4	95.1	116.3	432.0	27.8
4-5	7,817	76	5.5	61.1	74.6	93.4	101.4	118.1	149.2	433.9	40.4
6-8	9,238	74	6.6	69.7	88.6	116.6	131.4	157.6	212.3	675.2	63.3
9-12	12,089	73	4.1	69.0	92.8	128.7	141.7	174.4	230.1	658.1	70.1

Table 5.10 Testing Time for the 2019–2020 Online Summative Tests

Chapter 6. Reliability

Reliability refers to consistency in test scores. Reliability can be defined as the degree to which individuals' deviation scores remain relatively consistent over repeated administrations of the same test or alternate test forms (Crocker & Algina, 1986). For example, if a person takes the same or parallel tests repeatedly, he or she should receive consistent results. The reliability coefficient refers to the ratio of true score variance to observed score variance:

$$\rho_{XX'} = \frac{\sigma_T^2}{\sigma_X^2}.$$

There are various approaches for estimating the reliability of scores. The conventional approaches used are characterized as follows:

- The *test-retest* method measures stability over time. With this method, the same test is administered twice to the same group at two different points in time. If test scores from the two administrations are highly correlated, then the test scores are deemed to have a high level of stability. For example, if the result is highly stable, those who scored high on the first administration tend to obtain a high score on the second administration. The critical factor, however, is the time interval. The time interval should not be too long, which could allow for changes in the test takers' true scores. Likewise, it should not be too short, in which case memory and practice may confound the results. The test-retest method is most effective for measuring constructs that are stable over time, such as intelligence or personality traits.
- The *parallel-forms* method is used for measuring equivalence. With this design, two parallel forms of the test are administered to the same group. This method requires two similar forms of a test. However, it is very difficult to create two strictly parallel forms. When this method is applied, the effects of memory or practice can be eliminated or reduced, since the tests are not purely identical as with the test-retest method. The reliability coefficient from this method indicates the degree to which the two tests are measuring the same construct. While there are a wide variety of possible items to administer to measure any particular construct, it is only feasible to administer a sample of items on any given test. If there is a high correlation between the scores of the two tests, then inferences regarding high reliability of scores can be substantiated. This method is commonly used to estimate the reliability of achievement or aptitude tests.
- The *split-half* method utilizes one test divided into two halves within a single test administration. It is crucial to make the two half-tests as parallel as possible, as the correlation between the two half-tests is used to estimate reliability of the whole test. In general, this method produces a coefficient that underestimates the reliability for the full test. To correct the estimate, the Spearman-Brown prophecy formula (Brown, 1910; Spearman, 1910) can be applied. While this method is convenient, varying splits of the items may yield different reliability estimates.
- The *internal consistency* method can be employed when it is not possible to conduct repeated test administrations. Whereas other methods often compute the correlation between two separate tests, this method considers each item within a test to be a one-item

test. There are several other statistical methods based on this idea: Coefficient alpha (Cronbach & Chavelson, 2004), Kuder-Richardson Formula 20 (Kuder & Richardson, 1937), Kuder-Richardson Formula 21 (Kuder & Richardson, 1937), stratified coefficient alpha (Qualls, 1995), and Feldt-Raju coefficient (Feldt & Qualls, 1996; Feldt & Brennan, 1989).

• *Inter-rater reliability* is the extent to which two or more individuals (coders or raters) agree. Inter-rater reliability addresses the consistency of the implementation of a rating system.

Another way to view reliability is to consider its relationship with the standard errors of measurement (SEM)—the smaller the standard error, the higher the precision of the test scores. For example, classical test theory assumes that an observed score (X) of each individual can be expressed as a true score (T) plus some error (E), X = T + E. The variance of X can be shown to be the sum of two orthogonal variance components:

$$\sigma_{\rm X}^2 = \sigma_{\rm T}^2 + \sigma_{\rm E}^2.$$

Returning to the definition of reliability as the ratio of true score variance to observed score variance, we can arrive at:

$$\rho_{XX'} = \frac{\sigma_T^2}{\sigma_T^2 + \sigma_E^2} = \frac{\sigma_T^2}{\sigma_X^2} = \frac{\sigma_x^2 - \sigma_E^2}{\sigma_X^2} = 1 - \frac{\sigma_E^2}{\sigma_X^2}.$$

As the fraction of error variance to observed score variance approaches 0, the reliability then approaches 1.

In contrast to the homoscedastic errors assumed in CTT, the SEMs in IRT vary over the ability continuum. These heterogeneous errors are a function of a test information function (TIF) that provides different information about test takers depending on their estimated abilities. Often, the TIF is maximized over an important performance cut, such as the proficient cut score.

Because the TIF indicates the amount of information provided by the test at different points along the ability scale, its inverse indicates the "lack" of information at different points along the ability scale. This lack of information is the uncertainty, or the SEM, of the score at various score points. Conventionally, fixed-form tests are maximized near the middle of the score distribution, or near an important classification cut, and have less information at the tails of the score distribution.

In this chapter, test reliability for the OLEPA summative tests is provided using

- Cronbach's alpha;
- marginal SEM;
- marginal reliability;
- conditional SEM;
- classification accuracy and consistency; and
- inter-rater analysis.

The following sections describe the methods used in the computation. The results for the 2019–2020 OELPA summative assessment are provided in this chapter and Sections 4–6 of Appendix Part I.

- Section 4. Summative Assessment—Marginal Reliability
 - Figure S4.1 presents the marginal reliability by gender for each domain test across grades.
 - Figure S4.2 presents the marginal reliability by ethnicity for each domain test across grades.
 - Figures S4.3 and S4.4 present the marginal reliability by IEP and primary disability for each domain test across grades, respectively.
- Section 5. Summative Assessment—Conditional Standard Error of Measurement (CSEM)
 - Figures S5.1–S5.13 show the CSEM plots for each domain, overall, and comprehension tests for each grade.
- Section 6. Summative Assessment—Inter-Rater Analysis
 - Tables S6.1–6.6 display the inter-rater analysis result for each handscored item in each grade or grade band.

6.1 INTERNAL CONSISTENCY

Cronbach's alpha (Cronbach & Shavelson, 2004) is used to access the internal consistency of items in each test for each domain. In other words, Cronbach's alpha refers to the extent to which it is a consistent measure of a concept, in this case, each domain. A high Cronbach's alpha coefficient indicates that the items in the domain measure the same underlying concept (listening, reading, writing and speaking).

The paper-pencil and braille forms are excluded from the analysis due to their small size. Additionally, items with less than a 10% response rate are also excluded from the analysis.

Table 6.1 and Figure 6.1 show the result of analysis on Cronbach's alpha for each domain test. The Cronbach's alpha value for each domain was computed using the items from that domain. The reading domain in kindergarten has the lowest alpha coefficient, 0.77. According to Nunnally (1978), 0.7 is the minimum acceptable alpha coefficient. All domain tests meet the minimum acceptable requirement.

Grade	Listening	Reading	Speaking	Writing
к	.82	.77	.89	.92
1	.80	.87	.81	.93
2	.82	.82	.82	.84
3	.85	.84	.84	.86
4	.86	.84	.87	.86
5	.88	.85	.88	.87
6	.91	.81	.85	.89
7	.92	.82	.86	.90
8	.93	.86	.86	.91
9	.89	.82	.89	.89
10	.88	.84	.85	.87
11	.86	.84	.82	.84
12	.86	.85	.80	.83

Table 6.1 Cronbach's Alpha

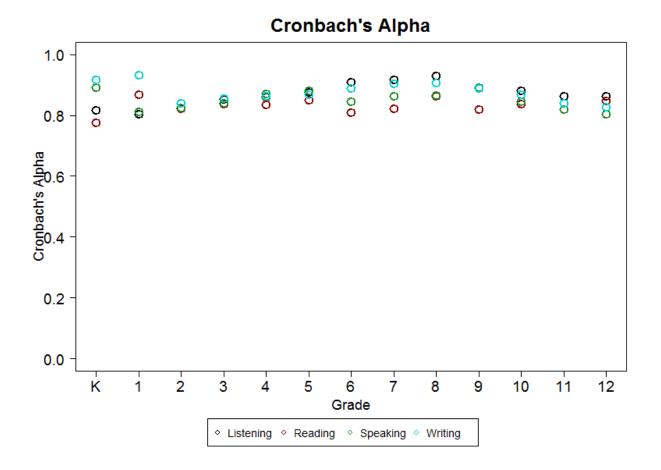


Figure 6.1 Cronbach's Alpha by Domain

6.2 MARGINAL STANDARD ERROR OF MEASUREMENT

Another way to examine score reliability is with the marginal standard error of measurement (MSEM), computed as the square root of $\bar{\sigma}_{error}^2$. $\bar{\sigma}_{error}^2$ came from the standard error of scale scores. A smaller value of MSEM indicates a greater accuracy of test scores. The marginal reliability $\bar{\rho}$ and the test MSEM behave oppositely: The higher the $\bar{\rho}(1 - \frac{\bar{\sigma}_{error}^2}{\sigma_{total}^2})$, the lower the MSEM and vice versa. The ratio of MSEM and the standard deviation of scale scores can also indicate the measurement errors. In other words, it shows the ratio of the error and total score $(\frac{\sigma_{error}}{\sigma_{total}})$. The analysis for the ratio is displayed in Figure 6.2.

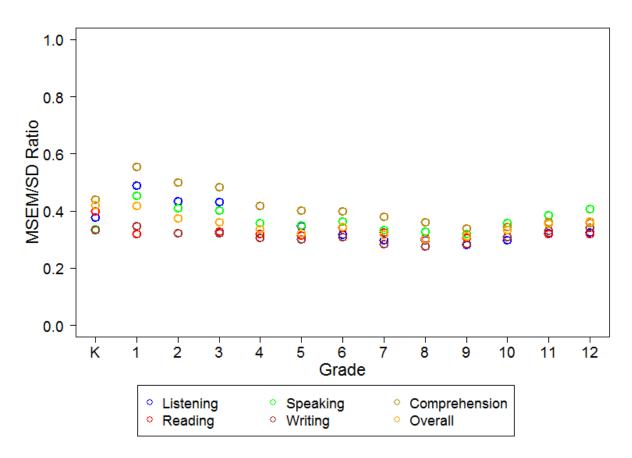


Figure 6.2 Ratio of Marginal Standard Error of Measurement to Standard Deviation of Estimated Scale Scores by Grade and Domain

* Domains with Exemption or Not Attempted are excluded.

6.3 MARGINAL RELIABILITY AND CONDITIONAL STANDARD ERROR OF MEASUREMENT

Marginal reliability (Sireci, Thissen, & Wainer, 1991) assesses the precision of scoring. It is based on the average of the conditional standard errors of measurement (CSEM) for the estimated theta scores. By definition, it is the proportion of true score variance among the observed score variance. While Cronbach's alpha was computed using item-level scores, marginal reliability was estimated by using expected a posteriori (EAP) estimates, which are used to estimate the domain scores. EAP is the estimate of true score, but its variance underestimates the true score variance, so the marginal reliability within domain can be estimated by

$$\bar{\rho} = \left(\frac{\sigma_{EAP}^2}{\sigma_{total}^2}\right) = 1 - \frac{\bar{\sigma}_{error}^2}{\sigma_{total}^2}$$

where $\bar{\sigma}_{error}^2$ is the average error variance (variance of the measurement error), $\sigma_{total}^2 = \sigma_{EAP}^2 + \bar{\sigma}_{error}^2$, σ_{EAP}^2 is the variance of the EAP estimate.

The maximum value for the marginal reliability is 1. A higher reliability coefficient indicates a greater precision of scoring. The marginal reliability for the 2019–2020 OELPA summative tests is presented in Table 6.2 and Figure 6.3. The marginal reliabilities by domain were obtained using the domain scores based on the MIRT models, and the overall/comprehension marginal reliabilities were obtained using the overall/comprehension scores based on the bi-factor models. The results show that the listening tests at grades 1–5 have the lowest reliabilities, followed by the speaking tests. The reliability for the speaking domain in the middle and high school tests are lower than the other domains. All the reliability indices are above 0.8, except for the listening and speaking tests in grade 1. In addition, Section 4 of Appendix Part I presents marginal reliability by gender, ethnicity, IEP, and primary disability, and Section 5 displays CSEM plots by grades. Groups with fewer than 50 students were excluded from the plots of marginal reliability by groups.

Grade	N	Listening	Reading	Speaking	Writing	Comprehension	Overall
к	9,616	.86	.84	.89	.89	.81	.82
1	8,403	.76	.90	.79	.88	.69	.83
2	6,870	.81	.90	.83	.90	.75	.86
3	5,558	.81	.89	.84	.90	.77	.87
4	4,150	.87	.90	.87	.91	.82	.89
5	3,693	.88	.90	.88	.91	.84	.90
6	3,120	.90	.88	.87	.90	.84	.88
7	3,008	.91	.90	.89	.92	.86	.90
8	3,132	.91	.91	.89	.92	.87	.91
9	3,930	.92	.91	.90	.92	.89	.90
10	3,347	.91	.90	.87	.91	.88	.89
11	2,749	.90	.90	.85	.89	.87	.87
12	2,082	.89	.90	.83	.88	.87	.87

Table 6.2 Marginal Reliability

* Domains with Exemption or Not Attempted are excluded.

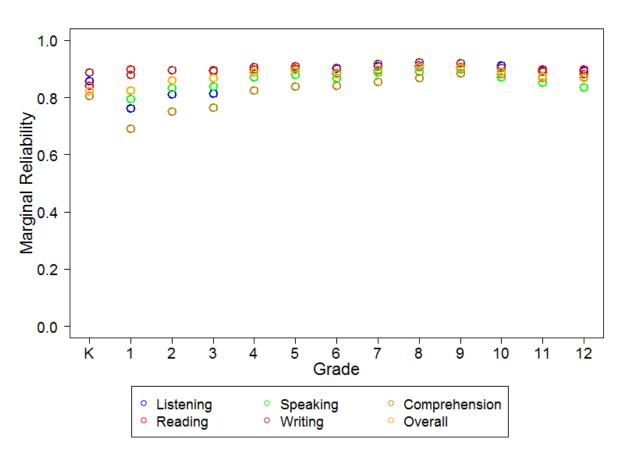


Figure 6.3 Marginal Reliability by Test

* Domains with Exemption or Not Attempted are excluded.

6.4 CLASSIFICATION ACCURACY AND CONSISTENCY

When student performance is reported in terms of achievement levels, a reliability of achievement classification is computed in terms of the probabilities of consistent classification of students as specified in Standard 2.16 in the *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 2014).

Classification accuracy (CA) analysis investigates how accurately students are classified into each performance level. The accuracy of proficiency classifications indicates the extent to which the proficiency classifications exactly agree with the classifications that might be made on examinees' true scores. The accuracy index is based on an estimated joint distribution of reported scores on the current form of the exam and the scores based on an all-forms average (true score).

Classification consistency (CC) analysis investigates how consistently students are classified into each performance level across two independent administrations of equivalent forms. The consistency of proficiency classifications indicates the extent to which the proficiency classifications exactly agree with the classification that might be made on an alternate version of the exam. The consistency index is based on an estimated joint distribution of scores on the specified form of the exam and the scores on an alternate (parallel) form of the exam. Since obtaining test scores from two independent administrations is not feasible due to issues such as logistics and cost constraints, the CC index is computed with the assumption that the same test is independently administered twice to the same group of students. Classification consistency rates can be lower than classification accuracy because consistency is based on two tests with measurement errors, while accuracy is based on one test with a measurement error and the true score. The accuracy and consistency rates for each performance level are higher for the levels with smaller standard error

For OELPA, since the overall proficiency is based on domain performance level, the CA and CC are examined at each cut score in each domain test. Five performance levels divided by four cut scores, cuts 1-4, are established for each domain test. Forms with an *n* count fewer than 50 are excluded from the analysis; for this reason, the paper-pencil and braille forms are excluded. Four domain cut scores divided the scale range into five performance levels.

In general, we can estimate the CA and CC using the following approach.

At domain level 1, we can estimate p_{il} for student *i* as follows. Suppose the estimated ability of student *i* $\hat{\theta}_i$ with $se(\hat{\theta}_i)$. Estimated plausible distribution for student *i*'s true ability is $\theta_i \sim N(\hat{\theta}_i, se(\hat{\theta}_i))$. The probability that the true score falls within performance level 1 based on the cut scores c_{l-1} and c_l is estimated as

$$\begin{split} p_{il} &= p(c_{l-1} \leq \theta_i < c_l) = p\left(\frac{c_{l-1} - \widehat{\theta}_i}{se(\widehat{\theta}_i)} \leq \frac{\theta_i - \widehat{\theta}_i}{se(\widehat{\theta}_i)} < \frac{c_l - \widehat{\theta}_i}{se(\widehat{\theta}_i)}\right) = p\left(\frac{\widehat{\theta}_i - c_l}{se(\widehat{\theta}_i)} < \frac{\widehat{\theta}_i - \theta_i}{se(\widehat{\theta}_i)} \leq \frac{\widehat{\theta}_i - c_{l-1}}{se(\widehat{\theta}_i)}\right) \\ &= \Phi\left(\frac{\widehat{\theta}_i - c_{l-1}}{se(\widehat{\theta}_i)}\right) - \Phi\left(\frac{\widehat{\theta}_i - c_l}{se(\widehat{\theta}_i)}\right). \end{split}$$

For level 1, $c_0 = -\infty$, and for level L, $c_L = \infty$. If scaled score is to be used, the above formula can be used based on the scale score distribution.

Let p_{il} be the probability of the true score at performance level 1 for the *i*th student, and define the following matrix based on L performance levels ($L \times L$ matrix)

$$\begin{pmatrix} n_{a11} & \cdots & n_{a1m} \\ \vdots & \vdots & \vdots \\ n_{al1} & \cdots & n_{alm} \end{pmatrix}$$

where n_{alm} is the sum of the probabilities for each expected performance level at each observed performance level (the level actually assigned). In the matrix, the row represents the observed level and the column represents the expected level.

Based on the above matrix, the CA for the cut c_l ($l = 1, \dots, L - 1$) is

$$CA_{c_l} = \frac{\sum_{k,m=1}^{l} n_{akm} + \sum_{k,m=l+1}^{L} n_{akm}}{N}$$

where N is the total number of students.

The CA for a single cut, for example, the CA at cut 2, is the sum of the n_{alm} values in blue $(\sum_{k,m=1}^{l} n_{akm})$ assigned in the levels equal to or below cut 2 at both expected and observed levels and in green $(\sum_{k,m=l+1}^{L} n_{akm})$ assigned in the levels above cut 2 at both expected and observed levels divided by the total number of students.

$$\begin{pmatrix} n_{a11} & n_{a12} & n_{a13} & \cdots & n_{a1L} \\ n_{a21} & n_{a22} & n_{a23} & \cdots & n_{a2L} \\ n_{a31} & n_{a32} & n_{a33} & \cdots & n_{a3L} \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ n_{a51} & n_{a52} & n_{a53} & \cdots & n_{a5L} \end{pmatrix}$$

For CC using p_{il} , similar to CA, a similar $L \times L$ table is constructed by assuming the test is administered twice independently to the same student group,

$$\begin{pmatrix} n_{c11} & \cdots & n_{c1L} \\ \vdots & \vdots & \vdots \\ n_{cL1} & \cdots & n_{cLL} \end{pmatrix}$$

where $n_{clm} = \sum_{i=1}^{N} p_{il} p_{im}$ which is the sum of the probabilities multiplied by each paired combination of performance. p_{im} can be computed based on the same equation for p_{il} described above.

The CC for the cut c_l ($l = 1, \dots, L - 1$) is:

$$CC_{c_l} = \frac{\sum_{k,m=1}^{l} n_{ckm} + \sum_{k,m=l+1}^{L} n_{ckm}}{N}.$$

Similarly, we can estimate CC for a single cut.

The CA and CC indices are affected by the interaction of the magnitude of se (θ) , the distance between adjacent cuts, the location of the cuts on the ability scale, and the proportion of students around a cut point. The larger the se (θ) , the closer the two adjacent cuts, and the greater the proportion of students around a cut point, the lower the indices.

Table 6.3 shows overall classification accuracy and consistency for domain performance levels, and the analysis results for each cut are presented in Table 6.4 and Figure 6.4 as well as Table 6.5 and Figure 6.5. For each cut, all CAs are above 0.8 and all CCs are above 0.75. In listening and speaking, both indices for cut 3 and/or cut 4 are relatively lower in elementary and middle school grades, which indicates lack of difficult items.

The classification accuracy and consistency results for overall proficiency levels are summarized in Table 6.6 and Figure 6.6. All CAs and CCs are above 0.8 for overall and above 0.85 for each cut. The CC indices for cut 1 are higher than those for cut 2 in all grades except for grades 9 and 10.

Our de		Accu	racy			Consis	tency	
Grade	Listening	Reading	Speaking	Writing	Listening	Reading	Speaking	Writing
К	.71	.66	.69	.76	.62	.57	.60	.68
1	.64	.72	.57	.69	.54	.63	.49	.60
2	.67	.70	.58	.70	.57	.60	.49	.60
3	.67	.70	.59	.68	.57	.60	.50	.58
4	.74	.71	.65	.73	.64	.61	.55	.65
5	.74	.72	.63	.77	.65	.63	.54	.69
6	.77	.70	.64	.75	.68	.60	.54	.67
7	.73	.73	.65	.74	.64	.64	.55	.65
8	.74	.75	.67	.74	.65	.67	.58	.66
9	.74	.79	.67	.77	.65	.71	.58	.69
10	.73	.76	.66	.74	.63	.67	.55	.65
11	.73	.75	.64	.72	.64	.66	.55	.63
12	.72	.74	.64	.71	.63	.64	.54	.61

Table 6.3 Summative Overall Classification Accuracy and Consistency for Domain Performance Levels, by Grade and Domain

* Domains with Exemption or Not Attempted are excluded.

Table 6.4 Classification Accuracy for Each Cut

Grade	_	Liste	ening		_	Rea	ding		_	Spea	aking		_	Wri	ting	
Grade	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4
к	.95	.92	.89	.91	.95	.91	.88	.89	.97	.94	.88	.87	.92	.93	.93	.94
1	.97	.95	.85	.83	.94	.93	.92	.93	.92	.84	.83	.83	.95	.89	.89	.91
2	.98	.97	.86	.85	.94	.93	.90	.92	.93	.87	.85	.85	.95	.92	.90	.91
3	.98	.98	.87	.84	.96	.92	.89	.93	.95	.91	.85	.83	.95	.91	.88	.92
4	.97	.97	.93	.87	.95	.93	.90	.92	.97	.93	.87	.84	.97	.94	.88	.92
5	.97	.96	.93	.87	.95	.93	.90	.92	.96	.92	.85	.85	.98	.95	.89	.93
6	.97	.97	.93	.89	.93	.90	.92	.94	.96	.93	.86	.86	.97	.95	.89	.93
7	.98	.96	.89	.90	.93	.91	.93	.96	.97	.92	.86	.88	.95	.91	.91	.95
8	.98	.97	.90	.88	.94	.93	.92	.95	.97	.94	.87	.87	.96	.92	.91	.94
9	.95	.95	.91	.93	.93	.92	.96	.98	.95	.92	.88	.90	.94	.91	.94	.97
10	.96	.94	.91	.92	.92	.92	.94	.96	.96	.91	.87	.88	.94	.91	.93	.95
11	.97	.95	.90	.91	.93	.91	.94	.96	.97	.92	.86	.87	.94	.90	.92	.95
12	.97	.94	.90	.90	.93	.92	.93	.95	.97	.92	.86	.86	.94	.90	.91	.94

* Domains with Exemption or Not Attempted are excluded. * Cuts 1 to 4 fall between performance levels 1 and 2, 2 and 3, 3 and 4, 4 and 5, respectively.

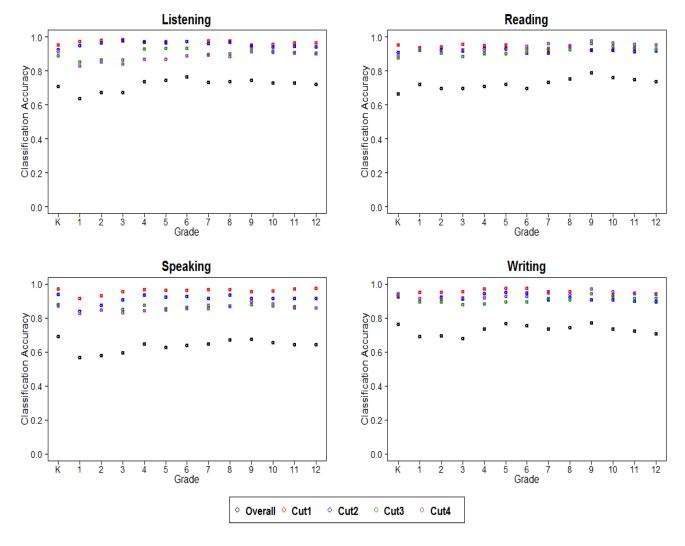


Figure 6.4 Domain Classification Accuracy

^{*} Domains with Exemption or Not Attempted are excluded. * Cuts 1 to 4 fall between performance levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

Table 6.5 Classification	Consistencv	for Each Cut

Grade	_	Liste	ening			Rea	ding		_	Spea	aking		_	Writ	ting	
Grade	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4
к	.93	.89	.85	.88	.93	.87	.83	.85	.96	.91	.83	.82	.89	.90	.91	.92
1	.96	.92	.79	.77	.91	.90	.89	.90	.88	.78	.76	.77	.93	.85	.85	.88
2	.97	.95	.81	.80	.91	.90	.86	.89	.90	.82	.79	.79	.93	.89	.85	.88
3	.98	.96	.81	.79	.94	.88	.84	.90	.93	.86	.79	.77	.93	.88	.83	.89
4	.96	.95	.89	.82	.93	.91	.86	.89	.95	.90	.82	.78	.96	.92	.84	.89
5	.96	.95	.91	.82	.93	.90	.86	.89	.95	.89	.80	.79	.97	.93	.85	.90
6	.96	.96	.90	.85	.90	.86	.88	.92	.95	.89	.80	.81	.96	.92	.85	.90

Orreade		Liste	ening			Read	ding			Spea	aking		_	Wri	ting	
Grade	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4
7	.96	.94	.85	.86	.89	.87	.91	.94	.95	.88	.80	.83	.93	.87	.88	.93
8	.96	.96	.86	.84	.91	.89	.89	.93	.95	.91	.82	.82	.94	.89	.87	.91
9	.93	.92	.88	.90	.89	.89	.94	.97	.93	.88	.83	.86	.92	.87	.92	.96
10	.94	.92	.87	.88	.89	.88	.92	.95	.94	.88	.82	.84	.91	.87	.90	.94
11	.95	.92	.86	.87	.90	.87	.91	.94	.96	.88	.80	.82	.92	.86	.88	.93
12	.95	.92	.86	.86	.90	.88	.90	.93	.96	.88	.80	.81	.91	.86	.88	.92

* Domains with Exemption or Not Attempted are excluded. * Cuts 1 to 4 fall between performance levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

Reading Listening 1.0 1.0 i 0.0 0.0 6 Grade 6 Grade 11 ĸ 1 2 3 4 5 7 8 ģ 10 11 12 ĸ ł. 2 3 4 5 7 8 9 10 12 Speaking Writing 1.0 1.0 ŝ a 0.0 0.0 ĸ 6 Grade 10 11 12 5 6 Grade 9 10 11 12 2 5 7 ģ ĸ 1 ź 7 8 1 3 4 8 3 4 • Overall • Cut1 • Cut2 ° Cut3 ° Cut4

Figure 6.5 Domain Classification Consistency

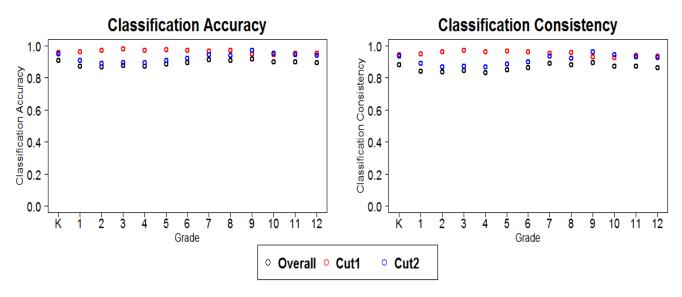
^{*} Domains with Exemption or Not Attempted are excluded. * Cuts 1 to 4 fall between performance levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

O rreade		Accuracy		C	onsistency	
Grade	Overall	Cut 1	Cut 2	Overall	Cut 1	Cut 2
к	.91	.96	.95	.89	.95	.94
1	.87	.97	.91	.84	.95	.89
2	.87	.97	.89	.84	.97	.87
3	.88	.98	.90	.85	.97	.87
4	.87	.97	.90	.83	.96	.87
5	.89	.98	.91	.85	.97	.89
6	.90	.97	.92	.87	.97	.90
7	.92	.97	.95	.89	.95	.94
8	.91	.97	.94	.88	.96	.92
9	.92	.95	.97	.90	.93	.96
10	.90	.95	.96	.87	.93	.94
11	.90	.96	.95	.87	.94	.93
12	.89	.95	.94	.86	.94	.93

Table 6.6 Summative Classification for Proficiency Levels

* Cut1: Cut between Emerging and Progressing; Cut2: Cut between Progressing and Proficient.

Figure 6.6 Proficiency Classification



* Cut1: Cut between Emerging and Progressing; Cut2: Cut between Progressing and Proficient.

6.5 INTER-RATER ANALYSIS

The fidelity of handscoring is monitored by having a subset of student responses independently scored by two raters. Each student response is scored holistically by a trained and qualified rater using the scoring criteria developed and approved by ELPA21, with a second read conducted on 20% of responses for the summative test for each task type. Responses are selected randomly for second readings and scored by raters who are not aware of the score assigned by the first rater or even that the response has been scored previously. The rater pool consists of teachers, test administrators, administrators, or other qualified staff.

In the 2019–2020 OELPA summative assessment, 11 handscored items in kindergarten, 9 handscored items in grade 1, and 13 handscored items in each of the other grade or grade-band online tests were scored by second raters. Twenty percent of handscores were monitored by second raters. In the screener assessment, OELPA utilized local TAs for scoring, and therefore, there were no second rater scores.

Handscorer score reliability is examined using Cohen's quadratic weighted Kappa coefficient. The coefficient allows differential weighting of disagreement and a measure of agreement corrected for chance. In addition, the frequencies and percentages of the exact match between first rater and second rater, the exact match plus +1/-1 score differences, +2/-2 and above differences are computed. Handscored items on paper and braille forms are not included in the results due to the small sample size.

Table 6.7 contains the summary of Kappa coefficients for each test. The table shows that 54.1%– 95.8% of handscores are consistent between the first rater and the second rater, and 0.2%–5.0% of handscores are off by two or more points across the six tests. The weighted Kappa coefficients range from 0.6362 to 0.9353.

The inter-rater consistencies are also assessed by item and are summarized in Section 6 of Appendix Part I.

Grade/Grade Band	Score Points	Number of Items	Weigl Kap		% Ex Agreei		% with Agree		% Not w Agree	
Banu	Points	of items	Min	Мах	Min	Max	Min	Max	Min	Max
к	2	6	.7846	.8610	79.6	95.0	97.5	99.7	0.3	2.5
n	3	5	.8099	.8630	70.2	73.7	98.7	99.2	0.8	1.3
	2	5	.6362	.8722	82.3	95.8	98.1	99.8	0.2	1.9
1	3	2	.6593	.9133	72.3	87.1	97.7	99.8	0.2	2.3
1	4	1	.6803	.6803	63.9	63.9	96.8	96.8	3.2	3.2
	5	1	.8370	.8370	56.4	56.4	95.9	95.9	4.1	4.1
	2	5	.6894	.8236	86.9	93.9	99.2	99.8	0.2	0.8
2-3	3	4	.8178	.8634	71.8	82.2	98.7	99.3	0.7	1.3
2-3	4	3	.8261	.8623	69.2	73.2	95.2	99.6	0.4	4.8
	5	1	.8410	.8410	63.8	63.8	97.0	97.0	3.0	3.0
	3	8	.6788	.9353	67.8	92.4	98.0	99.7	0.3	2.0
4-5	4	1	.8127	.8127	63.5	63.5	96.4	96.4	3.6	3.6
	5	4	.7679	.8563	54.1	69.5	95.4	97.3	2.7	4.6
6.9	3	8	.7800	.8740	72.3	83.9	97.8	99.6	0.4	2.2
6-8	5	5	.8596	.9002	62.4	70.3	96.3	99.3	0.7	3.7
0.42	3	8	.7466	.8390	62.5	80.0	98.0	99.2	0.8	2.0
9-12	5	5	.8374	.8935	59.3	73.6	95.0	98.8	1.2	5.0

Table 6.7 Overall Inter-Rater Analysis

Chapter 7. Validity

Validity refers to the degree to which "evidence and theory support the interpretations of test scores entailed by proposed uses of tests" (American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME], 2014). Messick (1989) defines validity as "an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores and other modes of assessment." Both definitions emphasize evidence and theory to support inferences and interpretations of test scores. The Standards (AERA, APA, & NCME, 2014) suggests five sources of validity evidence that can be used in evaluating a proposed interpretation of test scores. When validating test scores, these sources of evidence should be carefully considered.

The first source of evidence for validity is the relationship between the test content and the intended test construct. In order for test score inferences to support a validity claim, the items should be representative of the content domain, and the content domain should be relevant to the proposed interpretation of test scores. To determine content representativeness, diverse panels of content experts conduct alignment studies, in which experts review individual items and rate them based on how well they match the test specifications or cognitive skills required for a particular construct (discussions about test development, form construction, scaling, equating, and standard setting can be found in related ELPA21 documents). Test scores can be used to support an intended validity claim when they contain minimal construct irrelevant variance. For example, a mathematics item targeting a specific mathematics skill that requires advanced reading proficiency and vocabulary has a high level of construct-irrelevant variance. Thus, the intended construct of measurement is confounded, which impedes the validity of the test scores. Statistical analyses, such as factor analysis or multi-dimensional scaling of relevance, are also used to evaluate content relevance. Evidence based on test content is a crucial component of validity, because construct underrepresentation or irrelevancy could result in unfair advantages or disadvantages to one or more groups of test takers (see Section 7.1, Dimensionality Analysis).

The second source of evidence for validity is based on "the fit between the construct and the detailed nature of performance or response actually engaged in by examinees" (AERA, APA, & NCME, 2014). This evidence is collected by surveying test takers about their performance strategies or responses to particular items. Because items are developed to measure particular constructs and intellectual processes, evidence that test takers have engaged in relevant performance strategies to correctly answer the items supports the validity of the test scores.

The third source of evidence for validity is based on internal structure: the degree to which the relationships among test items and test components relate to the construct on which the proposed test scores are interpreted. Differential item functioning, which determines whether particular items may function differently for subgroups of test takers, is one method for analyzing the internal structure of tests. Other possible analyses to examine internal structure are dimensionality assessment, goodness-of-model-fit to data, and reliability analysis (see Chapter 6, Reliability, for details).

A fourth source of evidence for validity is the relationship of test scores to external variables. *The Standards* (AERA, APA, & NCME, 2014) divides this source of evidence into three parts: convergent and discriminant evidence, test-criterion relationships, and validity generalization.

Convergent evidence supports the relationship between the test and other measures intended to assess similar constructs. Conversely, discriminant evidence delineates the test from other measures intended to assess different constructs. To analyze both convergent and discriminant evidence, a multi-trait, multi-method matrix can be used. Additionally, test-criterion relationships indicate how accurately test scores predict criterion performance. The degree of accuracy mainly depends upon the purpose of the test, such as classification, diagnosis, or selection. Test-criterion evidence is also used to investigate predictions of favoring different groups. Due to construct underrepresentation or construct-irrelevant components, the relation of test scores to a relevant criterion may differ from one group to another. Furthermore, validity generalization is related to whether the evidence is situation-specific or can be generalized across different settings and times. For example, sampling errors or range restriction may need to be considered to determine whether the conclusions of a test can be assumed for the larger population.

The fifth source of evidence for validity is based on whether the intended and unintended consequences of the test use should be included in the test-validation process. Determining the validity of the test should depend upon evidence directly related to the test; this process should not be influenced by external factors. For example, if an employer administers a test to determine hiring rates for different groups of people, an unequal distribution of skills related to the measurement construct does not necessarily imply a lack of validity for the test. However, if the unequal distribution of scores is in fact due to an unintended, confounding aspect of the test, this would interfere with the test's validity. As described in this document, test use should align with the intended purpose of the test.

Supporting a validity argument requires multiple sources of validity evidence. This then allows for one to evaluate if sufficient evidence has been presented to support the intended uses and interpretations of the test scores. Thus, determining the validity of a test first requires an explicit statement regarding the intended uses of the test scores, and subsequently, evidence that the scores can be used to support these inferences. In this technical report, the standardized test administration can be found in Chapter 2, scoring in Chapter 3, reporting in Chapter 8, and quality control in Chapter 9.

In this chapter, validity for the summative assessment is measured by examining the internal structure of the items and the comparison of student abilities versus the difficulty of the items. The domain test internal structure is measured using domain dimensionality. The appropriateness of the assessment for the student population is assessed by comparing student abilities with test difficulties.

Additional results for assessing validity are summarized in the Sections 7–8 in Appendix Part I:

- Section 7. Summative Assessment—Dimensionality
 - Figures S7.1–S7.6 present the scree plots for each domain test. If a test involves multiple forms, the plots are broken down by grade.
- Section 8. Summative Assessment—Ability vs. Difficulty
 - Figures S8.1–S8.6 present the comparison of student ability vs. test difficulty on the logit scale for each domain test for each grade or grade band of students, respectively.

7.1 DIMENSIONALITY ANALYSIS

The graded response model (Samejima, 1969) used for operational scoring of ELPA21 assumes that the domain tests are essentially unidimensional. For OELPA, a principal component analysis (PCA) with an orthogonal rotation method (Jolliffe, 2002; Cook, Kallen, & Amtmann, 2009) was used to investigate the dimensionality for each domain test.

The results are presented in the scree plots in Section 7 in Appendix Part I. The graphs show that the magnitude of the first eigenvalue is always noticeably larger than the magnitude of the second factor in all tests, which indicates that each domain test has one dominant factor, consistent with the assumption of essential unidimensionality within domains.

7.2 STUDENT ABILITIES VS. TEST DIFFICULTIES

When student abilities are well matched to test difficulties, the measurement errors are reduced. Therefore, it is desired that the test difficulty matches student ability. To examine this aspect of the test, domain difficulties were plotted versus student abilities.

The results are included in Section 8 in Appendix Part I. It shows that student abilities are generally higher than test difficulties in all domain tests, except the reading tests in grades 9–12, where the test difficulties match student abilities well.

Chapter 8. Reporting

The OELPA results are available in the Online Reporting System (ORS) and ORS-generated paper family reports to be sent home with students.

8.1 ONLINE REPORTING SYSTEM

The ORS generates a set of online score reports that includes reliable and valid information describing student performance for students, parents, educators, and other stakeholders for both summative and screener assessments. Because score reports on student performance are updated each time students complete tests, and those tests are handscored, authorized users (e.g., school principals, teachers) may view student performance on the tests and can use the results to improve student learning. In addition to the individual student's score report, the ORS produces aggregate score reports for teachers, schools, districts, and states. Additionally, the ORS provides participation data that help monitor the student participation rate.

Furthermore, to facilitate comparisons, each aggregate report contains summary results for the selected aggregate unit, as well as all aggregate units above the selected aggregate. For example, if a school is selected, the summary results of the district to which the school belongs and the summary results of the state are also provided so that school performance can be compared with district and state performance. If a teacher is selected, the summary results for the school, the district, and the state are also provided for comparison purposes. Table 8.1 shows the typical types of online reports and the levels at which they can be viewed (student, roster, teacher, school, and district).

Level of Aggregation	Types of Online Score Reports
State District School Teacher Roster	Number of students tested and percentage of students determined proficient (overall and by subgroup) Average overall and comprehension scale scores and standard errors of the average scale scores (overall and by subgroup) Percentage of students at each domain performance level (overall and by subgroup) Average domain scale scores and the standard errors of average scale scores (overall and by subgroup) On-demand student roster report
Student	Overall and comprehension scale scores and standard errors of the scale scores Proficiency status based on the domain performance levels Domain scale scores with domain performance levels and level descriptors

Table 8.1 Types	of Online Score	e Reports by	Level of A	aareaation
				iggi egalion

8.1.1 Types of Online Score Reports

The Online Reporting System (ORS) is designed to help educators, students, and parents answer questions regarding how well students have performed on the assessment for each domain. The

ORS is designed with great consideration for stakeholders who are not technical measurement experts (e.g., teachers, parents, students). It ensures that test results are easily readable. Simple language is used so that users can quickly understand assessment results and make valid inferences about student achievement. In addition, the ORS is designed to present student performance in a uniform format. For example, similar colors are used for groups of similar elements, such as achievement levels, throughout the design. This design strategy allows state-, district-, and school-level users to compare similar elements and to avoid comparing dissimilar elements.

Once authorized users log in to the ORS and select Score Reports, the online score reports are presented hierarchically. The ORS starts by presenting summaries on student performance by grade at a selected aggregate level. In order to view student performance for a specific aggregate unit, users can select the specific aggregate unit from a drop-down menu with a list of aggregate units (e.g., schools within a district or teachers within a school) to choose from. For more detailed student assessment results for a school, a teacher, and a roster, users can select the grade on the online score reports.

Generally, the ORS provides two categories of online score reports: aggregate score reports and student score reports. Table 8.1 summarizes the typical types of online score reports available at the aggregate level and the individual student level. Detailed information about the online score reports and instructions on how to navigate the online score reporting system can be found in the *Online Reporting System User Guide*. Figure 8.1 shows the online report for state overall performance, Figure 8.2 and Figure 8.3 show the online district report for overall performance and the domain performance, and Figure 8.4 shows the online student report.

Score Reports	Reports & Fi	les 🔻 🛛 🔝 State at a		
			oox 🔍 Search Students View/Edit Rosters	This Page: 🕜 Help 🖶 Print 🖳 Exp
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lome Page D	ashboard			
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Test: OELI	PA V			
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		d of the selected administration		
 Scores for my cr Scores for stude 		y tested during the selected adr	ministration	
Select				
Ohio Department o	Education	~		
	rmance on the C		^{iion.} de: Ohio Department of Ed	lucation, Spring2020
Overall Perfo				lucation, Spring2020
Overall Perfo	rmance on the C	ELPA test, by Grad		lucation, Spring2020
Overall Perfo OELPA Grade Kindergarten Grade 1	Number of Students Tested 10121 8800	Percent Determined Proficient 9% 20%		lucation, Spring2020
Overall Perfo OELPA Grade Kindergarten Grade 1 Grade 2	Number of Students Tested 10121 8800 7321	Percent Determined Proficient 9% 20% 26%		lucation, Spring2020
Overall Perfo OELPA Grade Kindergarten Grade 1 Grade 2 Grade 3	Number of Students Tested 10121 8800 7321 5853	Percent Determined Proficient 9% 20% 26% 19%		lucation, Spring2020
Overall Perfo OELPA Grade Kindergarten Grade 1 Grade 2	Number of Students Tested 10121 8800 7321	Percent Determined Proficient 9% 20% 26%		lucation, Spring2020
Overall Perfo OELPA Grade Kindergarten Grade 1 Grade 2 Grade 3 Grade 4	Number of Students Tested 10121 8800 7321 5853 4418	Percent Determined Proficient 9% 20% 26% 19% 24%		lucation, Spring2020
Overall Perfo OELPA Grade Kindergarten Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	Number of Students Tested 10121 8800 7321 5853 4418 3993	Percent Determined 9% 20% 26% 19% 24% 18%		lucation, Spring2020
Overall Perfo OELPA Grade Kindergarten Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 6	Number of Students 10121 8800 7321 5853 4418 3993 3364	Percent Determined Proficient 9% 20% 26% 19% 24% 18% 18%		lucation, Spring2020
Overall Perfo OELPA Grade Kindergarten Grade 1 Grade 2 Grade 3 Grade 3 Grade 4 Grade 5 Grade 6 Grade 7	Number of Students 10121 8800 7321 5853 4418 3993 3364 3252	Percent Determined Proficient 9% 20% 20% 26% 19% 24% 18% 18% 16% 9%		lucation, Spring2020
Overall Perfo	Number of Students Tested 10121 8800 7321 5853 4418 3993 3364 3252 3381	Percent Determined Percent Determined 9% 20% 26% 19% 24% 18% 16% 9% 10%		lucation, Spring2020
Overall Perfo	rmance on the C Number of Students Tested 10121 8800 7321 5853 4418 3993 3364 3252 3381 4291	Percent Determined 9% 20% 26% 19% 24% 16% 9% 10% 4%		lucation, Spring2020
Overall Perfo	Number of Students Tested 10121 8800 7321 5853 4418 3993 3364 3252 3381 4291 3671	Percent Determined Percent Determined 9% 20% 26% 19% 24% 18% 16% 9% 10% 4% 7%		lucation, Spring2020

Figure 8.1 ORS Page for State Overall Performance

*No valid scores for this grade and subject



Figure 8.2 ORS Page for District Overall Performance

Performance on the Kindergarten OELPA Test: Demo District, Spring2020

Breakdown by: All	Comparison: ON			
Name ^	Number of Students	Average Overail Scale Score	Average Comprehension Scale Score	Percent Determined Proficient
Ohio Department of Education	10121	5601 ±6	5560 ±6	9
Demo District (999999) 🔾	2	5542 ±132	5605 ±215	0
Demo School 1 (999991) 🔾	2	5542 ±132	5605 ±215	0

Based on data from the OELPA, Spring2020 administration.

Ohio Department of Education

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Score Reports	Report	s & Files 🔻	🗋 Stat	e at a <mark>G</mark> la	nce		
			- i - i - i - i - i - i - i - i - i - i	linbox Q	Search Students Vie	ew/Edit Rosters This Page:	⑦ Help 🖶 Print 🖳 Export
Now viewing: Scores	or students w	ho were mine v	vhen they tested	during the s	elected administrati	on Change your Selection	1
District Performa How did my distric est: Kindergarten C Year: Spring2020 lame: Demo District	ct perform			f the OE	ELPA test?		
						Legend: Domain Performance	
						%Level 1 66Level 2	%Level 3 📕 %Level 4 📕 %Level 5
Performance of	n the Kin	deraarte		Test by	Domain: D	omo District Sn	ring2020
Performance of	n the Kir				Domain: D	emo District, Sp	oring2020
Performance of Breakdown by: All	n the Kir	dergarte ~	n OELPA Comparison:		/ Domain: D	emo District, Sp	ring2020
	n the Kir				/ Domain: D	emo District, Sp	ering2020
	Numb	er Average Overali		ON	d Domain	emo District, Sp Average Domain Scale Score	
Breakdown by: All	Numb	er Average Overali	Comparison: Average Comprehensior	Percent	d Domain		
Breakdown by: All	A Numb of Studer	er Average Overall Its Scale Score	Comparison: Average Comprehensior	Percent	d Domain	Average Domain Scale Score	E Percentage in Each Dome Performance Level
Breakdown by: All	A Numb of Studer	er Average Overall Its Scale Score	Comparison: Average Comprehensior Scale Score	Percent Determine Proficient	Domain Listening	Average Domain Scale Score 562 ±1	Percentage in Each Doma Performance Level
Breakdown by: All	A Numb of Studer	er Average Overall Its Scale Score	Comparison: Average Comprehensior Scale Score	Percent Determine Proficient	Domain Listening Reading	Average Domain Scale Score 562 ±1 562 ±1	EA Percentage in Each Dome Performance Level
Breakdown by: All	A Numb of Studer	er Average Overall Its Scale Score	Comparison: Average Comprehensior Scale Score	Percent Determine Proficient	Listening Reading Speaking	Average Domain Scale Score 562 ±1 562 ±1 587 ±1	E A Percentage in Each Doma Performance Level 1213 48 1115 1314 37 15 21 1212 26 16 38
Breakdown by: All	A Numb of Studer	er Average Overall Its Scale Score	Comparison: Average Comprehensior Scale Score	Percent Determine Proficient	Listening Reading Speaking	Average Domain Scale Score 562 ±1 562 ±1 587 ±1	E A Percentage in Each Doma Performance Level 1213 48 1115 1314 37 15 21 1212 26 16 38
Breakdown by: All	Numb of Studer	er Average Overall Its Scale Score	Average Comprehensior Scale Score	Percent Determine Proficient	Listening Reading Speaking Writing	Average Domain Scale Score 562 ±1 562 ±1 587 ±1 544 ±1 573 ±30 551 ±21	E Percentage in Each Doma Performance Level 1213 48 1115 1314 37 15 21 1210 26 16 36 34 26 28 5 7 100 100
Breakdown by: All Name Ohio Department of Educ	Numb of Studer	er Average Overall Scale Score	Comparison: Average Comprehensior Scale Score 5560 ±6	Percent Determine Proficient 9	Listening Reading Speaking Writing Listening	Average Domain Scale Score 562 ±1 562 ±1 587 ±1 544 ±1 573 ±30	E Percentage in Each Doma Performance Level 1213 48 1115 1314 37 15 21 1210 26 16 36 34 20 28 57
Breakdown by: All Name Ohio Department of Educ	Numb of Studer	er Average Overall Scale Score	Comparison: Average Comprehensior Scale Score 5560 ±6	Percent Determine Proficient 9	Listening Reading Speaking Writing Listening Reading	Average Domain Scale Score 562 ±1 562 ±1 587 ±1 544 ±1 573 ±30 551 ±21	E Percentage in Each Doma Performance Level 1213 48 1115 1314 37 15 21 1210 26 16 36 34 26 28 5 7 100 100
Breakdown by: All Name Ohio Department of Educ	Numb of Studer	er Average Overall Scale Score	Comparison: Average Comprehensior Scale Score 5560 ±6	Percent Determine Proficient 9	Listening Reading Speaking Writing Listening Reading Speaking Writing	Average Domain Scale Score 562 ±1 587 ±1 544 ±1 573 ±30 551 ±21 542 ±0	E Percentage in Each Dome Performance Level 1213 48 1115 1314 37 15 21 121(26 16 36 34 26 28 57 100 100 N/A
Breakdown by: All Name Ohio Department of Educ	Numb of Studer	er Average Overall Scale Score	Comparison: Average Comprehensior Scale Score 5560 ±6	Percent Determine Proficient 9	Listening Reading Speaking Writing Listening Reading Speaking Writing	Average Domain Scale Score 562 ±1 562 ±1 544 ±1 573 ±30 551 ±21 542 ±0 573 ±30	E Percentage in Each Dome Performance Level 1213 48 1115 1314 37 15 21 121(26 16 36 34 26 28 57 100 100 N/A
Breakdown by: All Name Ohio Department of Educ	Numb Studer eation 1012	er Average Overall Scale Score	Comparison: Average Comprehension Scale Score 5560 ±0 5605 ±215	Percent Determine Proficient 9	Listening Reading Speaking Writing Listening Reading Speaking Writing	Average Domain Scale Score 562 ±1 587 ±1 544 ±1 573 ±30 551 ±21 542 ±0	E Percentage in Each Dome Performance Level 1213 48 1115 1314 37 15 21 1210 26 16 36 34 26 28 57 100 100 N/A 100
Breakdown by: All Name Ohio Department of Educ	Numb Studer eation 1012	er Average Overall Its Scale Score	Comparison: Average Comprehension Scale Score 5560 ±0 5605 ±215	Percent Determine Proficient 9	Listening Reading Speaking Writing Listening Reading Speaking Writing	Average Domain Scale Score 562 ±1 562 ±1 544 ±1 573 ±30 551 ±21 542 ±0 573 ±30	E Percentage in Each Dome Performance Level 1213 48 1115 1314 37 15 21 121(26 16 36 34 26 28 57 100 100 N/A 100 100 100 100 100 100 100 100 100 10

Figure 8.3 ORS Page for District Domain Performance

Based on data from the OELPA, Spring2020 administration.

Ohio Department of Education

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artment ucation				×	\checkmark	2
Score Reports	Reports	& Files 🔻	State at a G	ance Search Students View	VEdit Rosters This Page	Help A Print E Export
0				· ·		
Now viewing: Score:	s for students who	were mine wher	n they tested during th	e selected administratio	n Change your Selection	l.
Student Overall How did my stud			DEL DA2			
Test: Kindergarten		n overall c	III OELFA?			
Year: Spring2020						
Name: Demo Teache	er					
Breakdown by: All		~ (Go			
	and Percent Deter	mined Proficien	t on the Kindergarten	OELPA Test: Demo Tea	cher and Comparison Gro	oups. Spring2020
	Percen	t Average Overall	Average		-	
Name	Determin Proficie	ed Carla	Comprehension Scale Score			
Ohio Department of Educ		5601 ±6	5560 ±6			
Demo District(99999	19) 🔍 0	5542 ±132	5605 ±215			
Demo school 1 (99999	1) 🔍 0	5542 ±132	5605 ±215			
Demo Teach	er 🔾 0	5542 ±132	5605 ±215			
Performance of	on the Kind	ergarten	OELPA Test, I	by Student: De	emo Teacher, Sp	oring2020
	Name	•	SSID	Proficiency Status	Overall Scale Score	Comprehension Scale Score
D	emo Student 1 🝳		YQ9999999	Progressing	5674 ±297	5819 ±283
D	emo Student 2 🔾		CG9999466	Progressing	5410 ±282	5390 ±229
		,				
Based on data from the OELPA,					Ohio	Department of Educatior

Figure 8.4 ORS Page for Student Report

8.1.2 Subgroup Reports

The aggregate score reports at a selected aggregate level are provided for students overall and by subgroup. Users can see student assessment results by any subgroup. Table 8.2 presents the typical subgroups and subgroup categories provided in the ORS. Figure 8.5 shows a mock-up for an online subgroup report.

Breakdown by Category	Displayed Category
Ethnicity	Hispanic or Latino
	American Indian or Alaska Native
	Asian
	Black or African American
	White

Table 8.2 Types of Subgroups

	Native Hawaiian or Other Pacific Islander		
	Two or More Races		
Gender	Male		
	Female		
Limited English Proficiency Status	Yes		
	No		
IDEA Indicator	Yes		
	No		
Enrolled Grade	Kindergarten		
	Grade 01		
	Grade 02		
	Grade 03		
	Grade 04		
	Grade 05		
	Grade 06		
	Grade 07		
	Grade 08		
	Grade 09		
	Grade 10		
	Grade 11		
	Grade 12		

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Score Reports	Reports & Files •	State at a G	lance			
		🚨 Inbox	Search Students	View/Edit Rosters	This Page: 🕜 Help 🗧	Print 🖳 Export
Now viewing: Score	s for students who were mine whe	en they tested during the	e selected administ	tration Change your	Selection	
District Overall How did my dist	Performance rict perform overall on	OELPA?				
Name: Demo District	L					
Performance of Breakdown by: All	on the Kindergarten	OELPA Test, b Comparison: ON	Number of	Average Overall	Average Comprehensio	Percent Determined
Breakdown by: All	Vame ^	Comparison: ON	Number of Students	Âverage Overall Scale Score	Average Comprehensio Scale Score	EA Percent Determined Proficient
Breakdown by: All Ohio De	Name ^	Comparison: ON Grouping All	Number of Students 10121	Average Overall Scale Score 5601 ±6	Average Comprehensio Scale Score 5560 ±6	Percent Determined Proficient 9
Breakdown by: All Ohio De Ohio De Ohio De	Vame ^	Comparison: ON	Number of Students	Âverage Overall Scale Score	Average Comprehensio Scale Score	EA Percent Determined Proficient
Breakdown by: All Ohio De Ohio De Ohio De	Name ^	Comparison: ON Grouping All Female	Number of Students 10121 4820	Average Overall Scale Score 5601 ±6 5656 ±8	Average Comprehensio Scale Score 5560 ±6 5621 ±8	Fercent Determined Proficient 9 9
Breakdown by: All Ohio De Ohio De Ohio De Ohio De	Name A partment of Education partment of Education partment of Education partment of Education	Comparison: ON Grouping All Female Male	Number of Students 10121 4820 5108	Average Overall Scole Score 5605 ±8 5546 ±8	Average Comprehensio Scale Score 55621 ±8 5501 ±8	En Percent Determined Proficient 9 9 8
Breakdown by: All Ohio De Ohio De Ohio De Ohio De Ohio De	Name Partment of Education partment of Education partment of Education partment of Education	Grouping All Female Male Unknown	Number of Students 10121 4820 5108 193	Average Overall Scale Score 5666 ±8 5546 ±8 5546 ±8 5675 ±45	Average Comprehension Scale Score 5560 ±6 5562 ±8 5501 ±8 5598 ±40 5598 ±40	Percent Determined Proficient 9 9 8 8 13
Breakdown by: All Ohio De Ohio De Ohio De Ohio De Demo	Name ^ partment of Education partment of Education partment of Education District (999999)	Comparison: ON Grouping All Female Male Unknown All	Number of Students 10121 4820 5108 193 2	Average Overall Scale Score 5601 ±6 5666 ±8 5546 ±8 5675 ±45 5542 ±132	Average Comprehension Scale Score 5560 ±6 5621 ±8 5598 ±40 5598 ±40 5605 ±215	Percent Determined Profice 9 9 8 13 0
Breakdown by: All Ohio De Ohio De Ohio De Ohio De Ohio De Demo Demo	Name partment of Education partment of Education partment of Education District (999999) Q District (999999) Q	Grouping All Female Unknown All Female	Number of Students 10121 4820 5108 193 2 2 1	Average Overall Score 5601 ±6 5656 ±8 5646 ±8 5675 ±45 5542 ±132 5674 *	Average Comprehension Scale 5560 ±6 5601 ±8 5598 ±40 5605 ±215 5819 *	Percent Determined Proficient 9 9 8 13 0 0
Breakdown by: All Ohio De Ohio De Ohio De Ohio De Demo Demo Demo S	Name A partment of Education partment of Education partment of Education District (999999) District (99999) District (99999) District (99999) District (99999) District (99999) District (999999) District (999999) District (999999) District (999999) District (999999) District (999990) District (999990) District (999990) District (999990) District (999990) District (99990) District (99900) District (99900) District (99900) District (99900) District (99000) District (99000) District (99000) District (99000) District (99000) District (99000) District (99000) District (90000) District (90000) District (90000) District (90000) District (90000) District (90000) District (90000) District (90000) District (900000) District (900000) District (9000	Comparison: ON Grouping All Female Male Unknown All Female Male Male	Number of Students 10121 4820 5108 183 2 1 1	Average Overall Scale 5601 ±6 5656 ±8 5546 ±8 5675 ±45 5542 ±132 5674 * 5410 *	Average Comprohension Scale Scale 5560 ±6 56621 ±8 5568 ±40 5605 ±215 5819 * 5390 *	Percent Determined Proficient 9 9 8 8 13 0 0 0 0

Figure 8.5 ORS Page for Subgroup Report

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8.2 PAPER REPORTS

The Online Reporting System (ORS) provides the functionality for users to print reports described earlier. The ORS also allows users to print the family report for each student. Figure 8.6 shows the mock-up of the individual student report.

ication			7			* *	
Score Repo	rts 🛱 Reports &	Files 👻 🔛	State at a Gla			2	
				lnbox 🔍 Search 🕄	Students View/Edit Ros	ters This Page: ⑦ Help	🔒 Print
Now viewing:	Scores for students who w	vere mine when they	tested during the s	selected administrat	ion Change your Sel	ection	
low did my		on the OELP,	A test?				
Overall Perform	ance on the Kindergarten	OELPA Test: Demo,	Student 1, Spring	2020			
Name		SSID	Proficien	cy Status	Overall Scale Score	Comprehension Scale Score	
Demo, S	Student 1 🔾	YQ9999999	Progressi	ng	5674 ±297	5819 ±283	
Name Ohio Departmen Demo Distri			Determined Proficient 9 0	Overall Scale Score 5601 ±6 5542 ±132	Average Comprehension Scale Score 5560 ±6 5605 ±215	on	
			0	5542 ±132	5605 ±215		
Demo School	1 (999991) 🔍						
	1 (999991)						
Information on 1 Proficiency Deter Proficient - Stude evel content-relate	Standard Error of Measure mination nts are Proficient when they da cacdemic tasks in English	ement attain a level of Englis	0 Ih language skill nec	5542 ±132		collaborate on, and succeed I	
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Figure 8.6. Mock-Up for Individual Student Report

Chapter 9. Quality Control

Thorough quality control has been integrated into every aspect of ELPA21 (including OELPA) summative and screener tests. ELPA21, the states (including Ohio Department of Education), Questar, CAI, and Measurement Incorporated (MI) have built in multiple layers of reviews and verifications to ensure that outputs are of the highest quality in areas such as materials prepared for item-writing workshops, test form constructions, test booklet development and printing, posttest score quality control processes, and reporting. Quality control for item-writing workshops, test form construction, and test booklet development and printing can be found in the related documents prepared by ELPA21 and associated vendors. This chapter describes the quality control procedures related to test administration, scoring, and reporting. The service was provided by CAI and MI.

9.1 QUALITY CONTROL IN TEST CONFIGURATION

For online summative and screener testing, the test configuration files contain the complete information required for test administration and scoring, such as the test blueprint specifications, slopes and intercepts for theta-to-scale score transformation, cut scores, and item information (i.e., answer keys, item attributes, item parameters, passage information). The accuracy of the configuration file is checked and confirmed independently numerous times by multiple teams prior to the testing window. Scoring is also verified before the testing windows open.

9.1.1 Platform Review

CAI's online test delivery system supports a variety of item layouts for online test administration to many populations of students, including students who need designated supports and accommodations to test online. Each item on the assessment goes through an extensive platform device review on different operating systems, including Windows, Linux, and iOS, to ensure that the item displays consistently across all platforms. Some of the layouts have the stimulus and item response options/response area displayed side by side. In each of these layouts, both the stimulus and the response options have independent scroll bars.

Platform review is a process in which each item is checked to ensure that it is displayed appropriately (i.e., rendered) on each tested platform. A platform is a combination of a hardware device and an operating system. In recent years, the number of platforms has proliferated, and platform review now takes place on various platforms that are significantly different from one another.

Platform review is conducted by CAI's quality assurance team. The team leader projects every item from CAI's Item Tracking System (ITS²), and team members, each behind a different platform, look at the same item to ensure that it renders as expected.

² ITS is CAI's item bank for ELPA21. It contains all information that relates to each item, such as item content categories at all levels, item type, maximum score points, item statistics from each administration, etc.

9.1.2 User Acceptance Testing and Final Review

Both internal and external user acceptance testing (UAT), usually the State's, were conducted before the testing window opened. Detailed protocols were developed for the review process of the Test Delivery System (TDS), and reviewers were given thorough instructions to note or report issues related to system functionality, item display, and scoring.

During the internal UAT, CAI staff took all OELPA online tests that covered the entire range of possibilities of item responses and the complete set of scoring rules in TDS. When issues were found, CAI took immediate actions to address them. The examples of issues identified and the actions taken during the internal UAT are presented below:

- Item layout issues: Some items were not rendering as anticipated in the TDS and the test was not moving. Item layouts were updated for these items to render correctly.
- Item drop-down zoom issue: A zoom issue with the Editing Task Choice (ETC: Student identifies an incorrect word or phrase and chooses the replacement from a number of options) items where the drop-down content was not enlarged was identified. The items were updated to support different zoom levels in the drop-down menus.
- Student eligibility issues: Braille eligibilities were not working as expected. Test IDs needed to be updated in TDS to resolve the issue.
- User eligibility issues: User eligibilities were not working as expected and they were updated based on State rules.
- Tool configuration issues: Some tools were not consistent across the tests and were updated based on State and ELPA21 guidelines.

When TDS was updated, the tests were administered again to ensure the issues were fixed. The process was repeated until all issues were resolved during the UAT period prior to operational testing.

State staff were also able to conduct a hands-on review of the system prior to the testing window opening. The states approved the TDS before the system was opened for testing.

Before the ORS opened, CAI and State staff conducted internal and external UAT of the system similar with that of TDS to ensure that the ORS would function as intended when opened to the public for score reporting.

9.2 QUALITY ASSURANCE IN SCORING

The quality assurance of scoring includes the assurance of the online data, the precision of handscoring, the correctness of machine scoring, and the strictness when applying the business rules in scoring. This section describes the details of scoring quality assurance.

The writing constructed-response items and speaking items were handscored by Measurement Incorporated (MI). For online tests, responses to the handscored items were transferred between CAI and MI on a rolling basis via Ledger.³ Therefore, as soon as a student submitted a test to TDS,

³ Ledger is an electronic system that CAI and MI use to transmit data from one vendor to the other for purposes of transmitting and reporting handscored item scores. Individual responses can be tracked at all times through Ledger before a record is reported.

the responses to handscored items were transformed into XLM format, and were then sent to Ledger, from which MI retrieved responses for handscoring. When scoring was complete, the record was sent to Ledger, from which CAI downloaded the record for final scoring. The data transmission process was automatic.

For paper-pencil tests, after test administration, student responses were entered into the CAI Data Entry Interface (DEI) on the state testing portal for all ELPA21 domain tests, with the exception of writing constructed-response items. The item responses of the writing constructed-response items were mailed to MI for scoring via secure shipping. After scoring, MI transmitted the scores to the Ledger system, from which CAI retrieved the item scores for final scoring. To answer speaking items, students who took paper-pencil tests spoke into the DEI directly, and the item responses followed the online procedure for scoring.

For braille tests, item responses were entered into the braille DEI by test administrators. The data were processed following the online data processing procedure, and the secure testing materials were returned to the scoring vendor, MI.

9.2.1 Quality Assurance in Online Data

CAI's TDS has a real-time, built-in quality monitoring component. After a test is administered to a student, TDS passes the resulting data to our quality assurance (QA) system. QA conducts a series of data integrity checks, ensuring, for example, that the record for each test contains information for each item, keys for multiple-choice items, score points in each item, and total number of items, and that the test record contains no data from items that have been invalidated.

Data pass directly from the Quality Monitoring System (QMS⁴) to the Database of Record (DoR), which serves as the repository for all test information and from which all test information for reporting is pulled. The Data Extract Generator (DEG) is the tool that is used to pull data from the DoR for delivery to each state. CAI staff ensure that data in the extracted files match the DoR prior to delivery to the state.

9.2.2 Quality Assurance in Handscoring

MI's scoring process is designed to employ a high level of quality control. The quality control procedures are implemented at each stage of the scoring process, which includes scorer recruitment, leader recruitment, training, and various reports that help to ensure scoring quality.

Scorer Recruitment/Qualifications

MI retains scorers who have years of experience in handscoring, and those scorers made up approximately 65% of the scorer pool. To complete the scorer staffing for this project, MI placed advertisements on various job boards, in local papers, in publications, and at regional colleges and universities. Recruiting events were held, and applications for scorer positions were screened by MI recruiting staff. Candidates were personally interviewed, and references and proof of a four-year college degree were collected. Candidates completed placement tests for English language arts (ELA; reading and writing) and mathematics. In this screening process, preference

⁴ QMS is CAI's Quality Monitoring System. It ensures that the information in a student record, such as item key or score point, is correct.

was given to candidates with previous experience scoring large-scale assessments. The scorer pool consisted of educators, writers, editors, and other professionals who were valued for their experience, but who were also required to set aside their own biases about student performance and accept the scoring standards.

Leadership Recruitment/Qualifications

Scoring directors and team leaders had experience as successful scorers and leaders on previous MI projects and had strong backgrounds in scoring content-specific projects. These individuals demonstrated strong organizational, leadership, and management skills. All scoring directors, team leaders, and scorers were required to sign confidentiality agreements prior to training with ELPA21 materials or handling secure materials.

Each room of scorers was assigned a scoring director or assistant scoring director. This individual led the handscoring for the duration of the project and was monitored by the scoring project manager. The scoring director conducted the team leader training and was responsible for training the scorers.

In general, team leaders assisted the scoring directors/assistant scoring directors with scorer training and monitoring by working with their teams in small group discussions and answering individual questions that scorers may not have felt comfortable asking in a large group. Once scorers were qualified, the team leaders were responsible for maintaining the accuracy and workload of team members. The ongoing monitoring identified those scorers who were having difficulty scoring and resulted in individual scorers receiving one-on-one retraining. If this process did not correct inaccuracies in scoring, individual scorers were released from the project.

Training

In range finding meetings, the full range of responses that represent each score point and produce scoring training materials including qualification, anchor, practice, and validity sets, were identified. The range finding process first involved MI review and selection of responses for range finding. During range finding, participants reviewed items and rubrics; iteratively score, discuss, and reach consensus on responses; and identify which ones to use as anchor and training responses.

To train ELPA21 scorers, MI scoring staff used approved rubrics and training materials. The training materials were composed of anchor, qualifying, and training responses provided by the ELPA21 Program. Training materials included a comprehensive annotated scoring guide for each item. The guide contained the anchor set scorers referenced while evaluating live student responses. The scoring guides also contained several typical student responses presented in score point order.

Guides included detailed annotations explaining how the scoring criteria applied to each response's specific features and why the response merited a particular score. Guides included responses that were the most useful in making scoring decisions, including some that fell within the upper and lower ranges of the score point to help scorers define the lines between score points.

Anchor and qualifying sets were designed to help the scorers learn to apply the criteria illustrated in the scoring guide, ensure that they become familiar with the process of scoring student responses, and assess the scorers' understanding of the ELPA21 scoring criteria before they were allowed to begin live scoring. The item-specific rubrics served as the scorers' constant reference. Scorers were instructed on how to apply the rubrics and were required to demonstrate a clear comprehension of each anchor set by performing well on the training materials that were presented for each grade and item.

Team leaders assisted the scoring directors with the training and monitoring of scorers. The scoring director conducted the team leader training before the scorer training. This training followed much of the same process as the scorer training, but additional time was allotted for review, discussion, and addressing anticipated scorer questions and concerns. To facilitate scoring consistency, it was imperative that each team leader imparted the same rationale for each response that other team leaders used. Once team leaders qualified, leadership responsibilities were reviewed and team assignments were given. A ratio of one team leader for 8–10 scorers ensured adequate monitoring of the scorers.

Scorer training involved an intensive review of the rubric and anchor responses, provided by the scoring director, to help the scorers internalize the scoring criteria. The scoring director and team leaders led a thorough discussion of the training materials with the entire group. All responses were discussed using the annotations from range finding. A similar process was followed in training for writing and speaking items.

Once the scoring guidelines were discussed, scorers were required to apply the scoring criteria by qualifying (i.e., scoring with acceptable agreement to the "true" scores decided upon at range finding) on at least one of the qualifying sets. Scorers who failed to achieve the qualifying criteria were given additional training. Scorers who did not perform at the required level of agreement for a given item or related group of items by the end of the qualifying process were not permitted to score live student work. The required level at the end of the qualifying process are the qualifying sets in which the reader has to score a 70% or higher with no non-adjacent scores.

Training was an ongoing process that did not end after the qualifying rounds. Feedback was an integral part of several reliability checks that were performed throughout the project. Primarily, team leaders monitored scorers' reliability by conducting read-behinds/listen-behinds on an asneeded basis. When live scoring begins, one of the team leader's primary jobs is to do read-behinds for their team members to ensure that they are scoring accurately. As this process continues, the team leader can start to recognize if the individual readers have a firm grasp of the criteria for the particular task type that is being scored or who may need some additional coaching. Once this is established using the read-behinds, the reader's notes that are sent for score clarifications, and reader reliability reports, the team leader can determine who needs less read-behinds or who needs more monitoring. This was a process whereby team leaders reread or re-listened to the responses and checked the scores of each scorer on their team to catch potential scorer drift (shifts in scoring over time) so that the scorer could have immediate feedback and be retrained in a timely fashion. The percentage of read-behinds/listen-behinds conducted for an individual scorer was not fixed but varied based on current levels of performance. Scorers were removed from scoring an item or a related group of items if they were unable to score consistently with the rubric and the anchor responses after retraining. The scores were reset so the items would be scored correctly by other scorers.

Development and range finding of the materials used with the 2017 administration were completed by a previous vendor. For 2019–2020, a field-test score validation of the new short response speaking items was conducted by MI. This information is available from the Program.

9.2.3 Handscoring Quality Assurance Monitoring Reports

Measurement Incorporated (MI) scorer accuracy was monitored throughout the scoring sessions by producing real-time, on-demand reports to ensure that an acceptable level of scoring accuracy was maintained. Interscorer reliability was tracked and monitored with multiple quality control reports that were reviewed by MI scoring staff. These reports were reviewed by the program manager, scoring project director, scoring directors, and team leaders. The following reports, available in daily, cumulative, and summary formats, were used during handscoring:

- *Interscorer Reliability Reports* displayed how often scorers were in exact agreement and supported maintaining an acceptable agreement rate. These reports provided exact, adjacent (raters match within one point), and nonadjacent (raters match within one point) interscorer agreement, as well as mismatches between scores and nonscorable codes and within nonscorable codes. They also indicated the number of responses read by each scorer.
- *Score Point Distribution Reports* displayed the percentage of responses that had been assigned each of the score points and nonscorable codes.
- *Validity Reports* tracked how the scorers performed by comparing predetermined scored responses to scores assigned by the selected scorer on the same set of responses. If the assigned score of the selected scorer fell outside of a determined percentage of agreement, remediation occurred and additional responses were reviewed by the team leader of the individual(s) who needed to be monitored more closely.
- *Item Status Reports* tracked each item and indicated the status (e.g., "first read complete," "tabled"). This report was used to monitor the overall status and progress of handscoring.

Maintaining Consistency

MI utilized numerous processes to ensure scorer accuracy and detect drift. The objective of the scoring process is to make sure that scorers rate student responses in a manner consistent with ELPA21 standards, within a single administration of ELPA21, as well as across multiple administrations.

The validity selection process involved MI scoring staff selecting 30–75 responses per item from live responses from the current administration to serve as validity responses. Validity responses were selected to illustrate trends identified by leadership in live responses but not strongly reflected in the anchor sets, represent particular types of responses identified as challenging to score during training, and assess transfer of scorers' knowledge of the anchor responses. Vetting of new validity responses involved identification and recommendation by team leaders while conducting read-behinds/listen-behinds, review and approval by scoring directors, and review and approval by the scoring project director.

The validity responses were used during handscoring to verify scorer accuracy. Validity responses were dispersed intermittently to the scorers throughout scoring at a rate of at least 10% of the total responses. These validity responses were blind reads, meaning that scorers saw these responses

the same as they saw the actual live student responses; there was no distinguishable difference. This helped ensure the internal validity of the process. All scorers who received validity responses had already successfully completed the training and qualifying process.

Next, the scores that the scorers assigned to the validity responses were compared to the predetermined scores in order to determine the validity of the scorers' scores. For each item, the percentage of exact agreement and the percentage of high and low scores were computed. The same data were also computed for each specific scorer. Using these pieces of data, various validity reports could be produced in real time and used to monitor for potential drift.

If results indicated that there was drift, or shifts in scoring over time, for a particular response, item, or scorer, action was taken to correct it. This action could include individual scorer retraining, room-wide retraining/recalibration, and/or rescoring responses where it was determined a scorer had been errantly assigning scores. Sometimes, when a particular validity response generated low agreement, an example of a similar response could be found in the existing training materials. If this was the case, a review of that particular training response was pursued in order to realign the scorer.

In most cases, including the 2019–2020 administration, there was not a room drift. Through the questions provided by notes, the use of reader reliability reports, and through read-behinds, the leadership can review particular types of responses and determine if there is a possible or potential shift in the scoring of those responses. The scoring directors create recalibration sets that consist of commonly seen type of responses. These recalibration sets are given to the teams at the beginning of every week to help deter any negative trends or drifts. Additional recalibration sets are created if the scoring director starts to see a trend of a drift and can be given at any time it is determined warranted. All recalibration sets are approved by the scoring management before given to the scoring teams.

Recalibration sets consisting of a validation set representing a variety of score points in random score point order were also used to maintain consistency. Sets varied in size from three to five responses based on particular issues observed during scoring. The recalibration sets were distributed at the beginning of the morning on a weekly basis. MI also recalibrated approximately once a week with scorers who had missed a required day's scoring session and were required to recalibrate. Scorers achieving less than an acceptable percentage of correct scores on these responses were monitored closely throughout that day. Scorers who did not demonstrate improvement received personal and extensive retraining. These scorers continued to be monitored on an individual basis until the next recalibration round took place.

By implementing these scoring procedures—using the same training materials whenever possible, utilizing a suite of real-time reports, and making training decisions based on report data—MI maximized scoring reliability and validity.

9.2.4 Quality Control on Final Scores

CAI's scoring engine is used to produce final scores upon receiving handscores. Before operational scoring, CAI created mock-ups of student records to verify the accuracy of the scoring engine. Both CAI's analysis team (responsible for the scoring engine) and psychometricians independently computed scores on the mock-ups of student records. The psychometric team performed score

verification using a different software and compared the scoring results with those from CAI's scoring engine. Both teams compared their results iteratively until a 100% match was reached.

During operational scoring, CAI's psychometricians independently scored students and compared the scores with the results from the scoring engine. Discrepancies were iteratively resolved until a 100% match was reached.

Before final scores were delivered to the State, they were also compared with the unofficial scores from CRESST, if needed. Discrepancies were again investigated and resolved until a 100% match was reached.

9.3 QUALITY ASSURANCE IN REPORTING

In 2019–2020, two types of score reports were produced for both summative and screener tests: online reports and printed reports (family reports only).

9.3.1 Online Report Quality Assurance

Every test undergoes a series of validation checks. Once the Quality Monitoring System (QMS) signs off, data are passed to the Database of Record (DoR), which serves as the centralized location for all student scores and responses, ensuring that there is only one place where the official record is stored. Only after scores have passed the QA checks and are uploaded to the DoR are they passed to the ORS, which is responsible for presenting individual-level results and calculating and presenting aggregate results. Absolutely no score is reported in the Online Reporting System (ORS) until it passes all of the QA system's validation checks.

9.3.2 Paper Report Quality Assurance

Statistical Programming

The family reports contain custom programming and require rigorous quality assurance processes to ensure their accuracy. All custom programming is guided by detailed and precise specifications in our reporting specifications document. Upon approval of the specifications, analytic rules are programmed and each program is extensively tested on test decks and real data from other programs. The final programs are reviewed by two senior statisticians and one senior programmer to ensure that they implement agreed-upon procedures. Custom programming is implemented independently by two statistical programming teams working from the specifications. Only when the output from both teams matches exactly are the scripts released for production. Quality control, however, does not stop there.

Much of the statistical processing is repeated, and CAI has implemented a structured software development process to ensure that the repeated tasks are implemented correctly and identically each time. CAI's software developers write small programs called macros that take specified data as input and produce data sets containing derived variables as output. Approximately 30 such macros reside in CAI's library. Each macro is extensively tested and stored in a central development server. Once a macro is tested and stored, changes to the macro must be approved by the director of score reporting and the director of psychometrics, as well as by the project directors for affected projects.

Each change is followed by a complete retesting with the entire collection of scenarios on which the macro was originally tested. The main statistical program is made up mostly of calls to various macros, including macros that read in and verify the data and conversion tables and macros that do the many complex calculations. This program is developed and tested using artificial data generated to test both typical and extreme cases. In addition, the program goes through a rigorous code review by a senior statistician.

Display Programming

The paper report development process uses graphical programming, which takes place in a Xeroxdeveloped programming language called Variable Data Intelligent PostScript Printware (VIPP) and allows virtually infinite control of the visual appearance of the reports. After designers at CAI create backgrounds, our VIPP programmers write code that indicates where to place all variable information (data, graphics, and text) on the reports. The VIPP code is tested using both artificial and real data. CAI's data generation utilities can read the output layout specifications and generate artificial data for direct input into the VIPP programs. This allows the testing of these programs to begin before the statistical programming is complete. In later stages, artificial data are generated according to the input layout and run through the score reporting statistical programs, and the output is formatted as VIPP input. This enables us to test the entire system. Programmed output goes through multiple stages of review and revision by graphics editors and the score reporting team to ensure that design elements are accurately reproduced and data are correctly displayed.

Once we receive final data and VIPP programs, the CAI score reporting team reviews proofs that contain actual data based on our standard quality assurance documentation. In addition, we compare data independently calculated by CAI psychometricians with data on the reports. A large sample of reports is reviewed by several CAI staff members to make sure that all data are correctly placed on reports. This rigorous review is typically conducted over several days and takes place in a secure location at CAI. All reports containing actual data are stored in a locked storage area. Prior to printing the reports, CAI provides a live data file and individual student reports with sample districts for the state staff review. CAI works closely with each state to resolve questions and correct any problems. The reports are not delivered until the state approves the sample reports and data file.

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Section 1: Summative Assessment - Scale Score Summary

* Domains with Exemption or Not Attempted are excluded.

* The statistics are suppressed when the N count is fewer than 10.

Cubana	Ctotus			Listening	er gur ven				Reading	Max 770 770 770 770 651 770 651 770 770 770 770 770 770 770 770 743 663 652 653 652 537	
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		10,052	237	561.6	775	78.3	9,925	247	561.6	770	77.4
	Female	4,792	269	570.0	775	77.9	4,749	295	569.5	770	77.4
Gender	Male	5,070	237	553.5	775	77.7	4,991	247	553.8	770	76.5
	Missing	190	370	567.0	775	80.6	185	383	568.9	770	79.1
	American Indian or Alaskan Native	18	428	564.3	663	67.4	18	447	563.2	651	61.1
	Asian	2,510	237	579.2	775	77.5	2,498	247	579.4	770	76.9
	Black or African American	1,887	237	558.3	775	76.0	1,868	247	556.4	770	75.9
Ethnicity	Hispanic or Latino	2,686	269	546.5	768	74.1	2,642	295	546.9	760	72.4
Lumony	Native Hawaiian or Other Pacific Islander	48	392	560.3	747	78.7	48	406	566.6	743	78.9
	Two or More Races	1,261	237	542.0	760	82.0	1,233	247	543.3	756	80.2
	White	1,612	309	578.4	775	76.7	1,588	301	577.7	770	76.4
	Other/Unknown	30	417	583.2	707	84.5	30	420	585.3	704	85.8
	Gifted	2					2				
Other	IEP	508	237	513.9	742	79.8	462	247	527.6	743	75.0
	Migrant	16	460	554.0	670	72.7	18	454	549.6	663	65.5
	Autism	123	237	479.5	643	76.9	93	247	509.7	652	72.8
	Developmental delay	9					7				
Primary Disability	Emotional disturbance	6					6				
	Hearing Impaired	3					4				
	Intellectual Disability	25	335	453.0	530	46.6	20	356	460.2	537	51.3
	Multiple disabilities	20	237	410.5	509	71.7	10	247	422.6	521	80.5

Table S1.1: Summative Scale Score Summary by Subgroup - Kindergarten

Cub arround	Ctatura		l	Listening			_		Reading		
Subgroup	Status -	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
	Orthopedic impairment	10	237	513.6	694	116.5	10	247	517.6	688	115.4
	Other health impairment	41	342	528.5	707	82.3	40	307	535.3	705	81.5
	Specific learning disability	35	432	524.9	628	51.6	34	409	525.8	634	55.3
	Speech or language impairment	223	361	546.1	742	67.1	225	340	546.7	743	68.1
	Traumatic brain injury	1					1				
	Visual impairment	5					4				

	Status -			Speaking		(conii)			Writing		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
Total		9,758	291	587.2	756	82.6	9,899	309	543.7	723	78
	Female	4,678	304	595.1	756	80.6	4,739	323	546.6	723	78
Gender	Male	4,897	291	579.7	756	83.7	4,977	309	540.3	723	79
	Missing	183	331	585.0	756	88.5	183	382	562.1	723	83
	American Indian or Alaskan Native	17	516	611.4	708	58.7	19	440	553.1	674	79
	Asian	2,460	291	603.3	756	76.2	2,483	309	574.1	723	77
	Black or African American	1,834	291	596.5	756	72.7	1,858	309	541.5	723	76
Ethnicity	Hispanic or Latino	2,596	304	571.1	753	85.0	2,623	323	517.7	719	69
Luniony	Native Hawaiian or Other Pacific Islander	47	388	585.8	744	71.6	48	400	550.3	723 723 723 723 674 723 723 723	8
	Two or More Races	1,221	291	558.3	750	98.1	1,250	309	518.4	716	7
	White	1,560	338	599.5	756	75.9	1,588	358	560.9	723	7
	Other/Unknown	23	352	630.3	732	76.5	30	426	576.2	693	8
	Gifted	2					2				
Other	IEP	452	291	529.1	729	90.3	454	309	516.0	709	7
	Migrant	17	355	547.7	693	99.9	17	417	530.0	679	8
	Autism	91	291	497.9	671	96.6	89	309	531.7	674	8
	Developmental delay	7					8				
Primary Disability	Emotional disturbance	7					6				
, <u> </u>	Hearing Impaired	3					3				
	Intellectual Disability	20	322	449.2	577	73.6	20	344	458.7	642	7
	Multiple disabilities	14	291	398.4	542	81.7	11	309	423.5	487	5

Table S1.1: Summative Scale Score Summary by Subgroup - Kindergarten (cont.)

Subaroun	Status			Speaking			Writing						
Subgroup	Status -	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	10	291	536.1	692	110.4	10	309	492.8	649	101.3		
	Other health impairment	35	319	548.5	727	95.2	39	340	509.3	695	84.5		
	Specific learning disability	33	414	543.5	634	62.6	34	428	505.7	661	54.5		
	Speech or language impairment	219	325	555.2	729	73.0	222	347	522.4	709	71.9		
	Traumatic brain injury	1					1						
	Visual impairment	5					4						

Cub ana un	Status		Cor	nprehensio	on				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		10,090	3377	5560.2	6865	552.8	10,123	3185	5600.5	7178	581.1
	Female	4,812	3616	5621.2	6865	552.6	4,821	3376	5656.1	7178	573.4
Gender	Male	5,088	3377	5501.3	6865	546.7	5,110	3185	5545.5	7178	581.7
	Missing	190	4278	5594.1	6865	550.8	192	3943	5668.9	7178	616.9
	American Indian or Alaskan Native	18	4661	5550.3	6210	440.2	19	4796	5647.9	6365	505.4
	Asian	2,519	3377	5667.8	6865	538.0	2,519	3185	5772.7	7178	562.7
	Black or African American	1,896	3377	5521.7	6865	542.0	1,904	3185	5594.4	7178	552.5
Ethnicity	Hispanic or Latino	2,703	3660	5472.5	6865	532.3	2,715	3376	5455.0	7130	546.3
Lumony	Native Hawaiian or Other Pacific Islander	48	4395	5578.1	6865	561.0	48	4313	5628.9	6991	564.4
	Two or More Races	1,263	3377	5439.1	6865	584.1	1,269	3185	5406.4	7085	625.3
	White	1,613	3616	5676.3	6865	545.1	1,618	3955	5730.5	7178	552.1
	Other/Unknown	30	4583	5695.1	6615	595.8	31	4553	5823.4	6806	635.1
	Gifted	2					2				
Other	IEP	513	3377	5260.0	6796	572.7	516	3185	5228.1	6928	588.1
	Migrant	18	4853	5495.1	6349	472.8	18	4566	5440.5	6416	561.9
	Autism	124	3377	5021.2	6211	534.9	124	3185	5052.5	6365	573.3
	Developmental delay	9					9				
Primary Disability	Emotional disturbance	6					7				
, <u>, , , , , , , , , , , , , , , , , , </u>	Hearing Impaired	4					4				
	Intellectual Disability	25	4088	4819.8	5316	334.9	25	3686	4728.7	5446	408.2
	Multiple disabilities	20	3377	4543.2	5196	488.9	21	3185	4462.8	5317	520.0

Table S1.1: Summative Scale Score Summary by Subgroup - Kindergarten (cont.)

C ub manua	<u>Ctatus</u>		Con	nprehensio	on		_		Overall		
Subgroup	Status Orthopedic impairment Other health impairment Specific learning disability Speech or language impairment Traumatic brain injury	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
		10	3377	5269.2	6605	818.9	10	3185	5205.0	6361	861.3
		41	3952	5361.2	6490	572.4	41	3556	5316.5	6699	649.8
		35	4527	5328.8	6194	395.5	35	4664	5297.7	6026	383.6
		226	4118	5486.7	6796	506.2	226	3716	5436.2	6928	493.4
	Traumatic brain injury	1					1				
	Visual impairment	5					5				

* Scale scores cannot be compared across grade bands.

0	04-4			Listening					Reading		
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
Total		8,723	239	559.1	712	72.8	8,628	241	554.6	744	79.3
	Female	4,128	295	564.6	712	71.8	4,104	302	560.2	744	80.2
Gender	Male	4,475	239	554.2	712	73.3	4,406	241	549.4	744	78.3
	Missing	120	368	556.9	701	73.5	118	411	552.4	735	75.9
	American Indian or Alaskan Native	28	450	557.1	701	67.8	28	423	553.9	720	85.7
	Asian	2,019	275	575.4	712	72.2	2,001	365	584.4	744	78.7
	Black or African American	1,597	275	554.3	712	71.4	1,572	302	555.2	744	75.6
Ethnicity	Hispanic or Latino	2,520	239	547.9	712	68.7	2,493	241	530.6	744	72.0
Lumeny	Native Hawaiian or Other Pacific Islander	55	402	569.7	691	79.3	55	373	571.8	717	82.4
	Two or More Races	1,078	295	542.0	712	76.7	1,074	266	530.2	744	77.8
	White	1,397	275	574.1	712	71.8	1,378	351	572.2	744	78.5
	Other/Unknown	29	416	564.7	684	70.9	27	415	569.3	711	82.9
	Gifted	23	478	607.4	684	49.8	23	409	615.6	695	73.6
Other	IEP	600	275	506.1	701	76.4	530	306	511.6	728	70.2
	Migrant	22	400	544.7	692	84.3	22	428	529.3	710	78.3
	Autism	116	275	462.6	670	81.9	84	306	512.7	700	83.4
	Developmental delay	2					1				
Primary Disability	Emotional disturbance	14	378	503.6	637	78.6	13	413	506.7	614	56.8
	Hearing Impaired	8					8				
	Intellectual Disability	33	372	468.9	613	59.3	26	401	455.3	580	50.6
	Multiple disabilities	26	275	407.6	586	73.5	10	395	484.8	744 744 744 735 720 744 744 744 744 744 711 695 728 710 700 700 614	78.6

Table S1.2: Summative Scale Score Summary by Subgroup - Grade 1

C ubarrour	Ctatus		l	Listening			Reading						
Subgroup	Status -	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	13	424	533.2	683	74.0	11	412	520.9	721	93.9		
	Other health impairment	68	359	515.2	653	71.7	60	377	507.9	655	62.1		
	Specific learning disability	85	376	514.5	637	54.6	84	395	486.1	667	57.6		
	Speech or language impairment	227	389	540.0	701	60.3	227	405	528.3	728	66.9		
	Traumatic brain injury	1					1						
	Visual impairment	2					2						

Subaroun	Status		Juogrou	Speaking					Writing		
Subgroup	Status	Ν	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
Total		8,534	265	584.7	736	71.4	8,584	245	552.7	733	82.
	Female	4,070	304	590.1	736	71.1	4,085	290	559.1	733	81.
Gender	Male	4,348	265	579.9	736	71.2	4,383	245	546.6	733	82.
	Missing	116	311	573.2	731	74.0	116	374	556.1	723	75.
	American Indian or Alaskan Native	27	492	607.8	727	55.2	28	411	555.8	715	86
	Asian	1,977	300	601.3	736	67.0	1,987	353	582.3	733	75
	Black or African American	1,565	306	586.1	736	63.2	1,575	290	553.8	733	77.
Ethnicity	Hispanic or Latino	2,448	265	572.1	736	71.3	2,469	245	528.6	733	79
Lumony	Native Hawaiian or Other Pacific Islander	55	328	586.4	701	65.1	55	341	565.8	702	84
	Two or More Races	1,067	276	563.4	736	84.6	1,070	272	525.8	733	86
	White	1,370	306	597.2	736	67.6	1,372	340	571.9	733	78
	Other/Unknown	25	469	599.3	693	60.8	28	385	567.9	694	86
	Gifted	23	533	630.4	693	43.3	22	385	613.1	688	72
Other	IEP	530	300	539.1	727	75.3	529	313	502.0	714	84
	Migrant	22	353	571.0	681	77.4	22	392	536.9	701	77
	Autism	83	300	487.3	665	97.7	82	313	504.9	681	92
	Developmental delay	2					1				
Primary Disability	Emotional disturbance	14	328	511.9	657	92.2	13	358	486.1	636	88
	Hearing Impaired	8					8				
	Intellectual Disability	27	332	487.6	601	74.4	27	349	424.5	633	81
	Multiple disabilities	9					9				

Table S1.2: Summative Scale Score Summary by Subgroup - Grade 1 (cont.)

Subaroup	Statua			Speaking			Writing						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	11	394	571.3	726	92.4	11	370	513.8	712	112.0		
	Other health impairment	62	352	549.9	656	63.1	61	359	496.8	653	81.2		
	Specific learning disability	83	386	540.2	661	63.6	84	340	470.0	655	76.1		
	Speech or language impairment	224	371	564.2	727	56.0	227	366	526.5	714	73.3		
	Traumatic brain injury	1					1						
	Visual impairment	2					2						

Cub ana un	C 4-4-1-2		Con	nprehensio	on		Overall					
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD	
Total		8,758	3428	5538.4	6640	512.9	8,802	3021	5604.5	6998	582.	
	Female	4,147	3814	5576.7	6640	511.7	4,170	3444	5655.2	6998	578.	
Gender	Male	4,491	3428	5503.5	6633	511.6	4,512	3021	5558.4	6998	583	
	Missing	120	4534	5521.8	6633	511.3	120	4072	5580.6	6891	569	
	American Indian or Alaskan Native	29	4797	5494.9	6503	501.3	29	4784	5629.2	6884	582	
	Asian	2,024	3836	5698.9	6633	516.5	2,028	3789	5793.5	6998	558	
	Black or African American	1,603	3814	5521.6	6633	501.2	1,610	3444	5598.0	6998	550	
Ethnicity	Hispanic or Latino	2,532	3428	5418.3	6633	467.3	2,550	3021	5460.3	6998	549	
Lumony	Native Hawaiian or Other Pacific Islander	55	4363	5655.4	6633	562.9	55	4232	5696.0	6713	577	
	Two or More Races	1,082	3759	5396.1	6633	513.8	1,090	3307	5423.2	6998	625	
	White	1,404	3836	5647.8	6640	508.7	1,410	3811	5735.2	6998	567	
	Other/Unknown	29	4532	5598.6	6445	516.5	30	4403	5687.4	6587	560	
	Gifted	23	4762	5908.0	6373	409.8	23	4681	6060.3	6651	435	
Other	IEP	605	3836	5184.1	6633	487.0	612	3789	5160.3	6873	573	
	Migrant	22	4599	5394.0	6525	555.5	22	4225	5469.6	6686	605	
	Autism	118	3836	4992.6	6633	560.7	122	3789	4925.0	6437	628	
	Developmental delay	2					3					
Primary Disability	Emotional disturbance	14	4454	5171.1	5945	414.5	14	3993	5081.1	6250	604	
inter producinty	Hearing Impaired	9					9					
	Intellectual Disability	33	4402	4909.5	5779	347.8	33	4036	4771.2	6048	498	
	Multiple disabilities	27	3836	4646.4	6029	495.0	27	3811	4558.6	5892	469	

Table S1.2: Summative Scale Score Summary by Subgroup - Grade 1 (cont.)

Qubarous	Ctotus		Con	nprehensio	on		_		Overall		
Subgroup	Status Orthopedic impairment Other health impairment Specific learning disability Speech or language impairment Traumatic brain	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
		13	4589	5316.6	6431	515.5	13	4364	5371.0	6819	699.8
		68	4195	5221.1	6161	439.4	68	4072	5208.1	6253	522.9
		86	4370	5160.4	6467	357.4	86	4026	5108.2	6272	455.1
		227	4526	5382.7	6633	412.5	229	4343	5419.3	6873	468.0
	Traumatic brain injury	1					1				
	Visual impairment	2					2				

* Scale scores cannot be compared across grade bands.

C ubana un	Ctotus			Listening					Reading		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		7,247	272	525.2	726	65.8	7,128	260	525.0	744	66.9
	Female	3,307	272	529.8	709	64.2	3,266	343	531.9	722	66.7
Gender	Male	3,845	279	521.3	726	66.9	3,770	260	519.0	744	66.5
	Missing	95	276	524.6	647	66.3	92	326	528.5	666	69.7
	American Indian or Alaskan Native	17	361	515.0	616	70.8	17	409	520.0	626	64.9
	Asian	1,467	272	534.8	699	62.0	1,451	375	542.8	723	63.4
	Black or African American	1,406	272	527.8	686	62.2	1,385	319	527.5	722	63.1
Ethnicity	Hispanic or Latino	2,241	272	517.9	726	65.8	2,209	260	512.8	744	65.3
Lumony	Native Hawaiian or Other Pacific Islander	45	345	525.2	626	57.5	45	406	529.5	647	63.5
	Two or More Races	950	296	509.3	682	72.8	921	350	506.3	704	71.6
	White	1,099	312	538.3	709	64.2	1,078	378	538.9	720	66.6
	Other/Unknown	22	345	514.0	637	78.3	22	397	517.4	623	73.2
	Gifted	36	440	573.2	659	50.3	36	467	583.2	686	63.3
Other	Home Schooled	1					1				
Other	IEP	601	272	479.9	679	67.7	524	260	479.5	670	56.9
	Migrant	20	368	520.9	644	79.4	20	378	516.1	670	82.1
	Autism	95	272	448.0	679	73.7	71	388	484.6	670	61.7
	Developmental delay	4					2				
Primary Disability	Emotional disturbance	9					9				
	Hearing Impaired	6					9				
	Intellectual Disability	38	340	437.0	539	50.7	30	319	439.5	511	43.2

Table S1.3: Summative Scale Score Summary by Subgroup - Grade 2

Subaroun	Status			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Multiple disabilities	35	272	385.2	571	60.3	9				
	Orthopedic impairment	5					1				
	Other health impairment	77	312	494.2	620	59.1	71	383	478.0	628	50.5
	Specific learning disability	186	375	493.3	634	52.5	177	386	468.6	642	46.0
	Speech or language impairment	142	319	511.5	646	57.9	141	375	509.1	654	58.3
	Traumatic brain injury	2					2				
	Visual impairment	2					2				

Subaroup	Status		Juogrou	Speaking	<i>e 2</i> (<i>con</i>				Writing	Max 723 723 723 710 657 617 709 684 639 700 637 638 637 680 658 663 658 658 658 532	
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		7,001	267	550.4	735	70.8	7,081	267	523.4	723	69
	Female	3,220	267	556.4	723	69.5	3,248	290	531.0	723	68
Gender	Male	3,692	268	545.1	735	71.3	3,740	267	516.7	710	6
	Missing	89	301	551.7	656	74.6	93	328	527.3	657	7
	American Indian or Alaskan Native	17	386	544.7	636	67.2	17	375	504.9	723 723 710 657 617 710 709 684 639 700 723 637 680 658 658 658	7
	Asian	1,427	303	559.5	724	67.3	1,443	324	540.5	710	6
	Black or African American	1,355	297	556.6	723	60.5	1,378	332	526.2	709	6
Ethnicity	Hispanic or Latino	2,173	267	539.8	735	73.8	2,185	267	511.7	684	6
Lumeny	Native Hawaiian or Other Pacific Islander	40	329	545.5	672	76.4	45	380	533.8	639	6
	Two or More Races	913	292	531.8	699	82.8	922	321	503.2	700	7
	White	1,057	287	568.1	714	62.5	1,069	299	538.0	723	6
	Other/Unknown	19	366	549.8	622	58.4	22	393	519.3	637	7
	Gifted	37	424	595.3	701	57.8	36	494	585.6	680	Ę
Other	Home Schooled	1					1				
Other	IEP	524	267	511.3	684	68.3	524	267	471.4	658	6
	Migrant	20	345	546.8	668	73.0	20	387	515.9	663	7
	Autism	67	287	486.6	660	75.8	71	310	468.3	658	7
	Developmental delay	2					2				
Primary Disability	Emotional disturbance	9					9				
	Hearing Impaired	5					8				
	Intellectual Disability	30	328	456.0	588	65.6	30	346	426.0	532	5

Table S1.3: Summative Scale Score Summary by Subgroup - Grade 2 (cont.)

Cubanous	Ctotus -		:	Speaking					Writing		
Subgroup	StatusMultiple disabilitiesOrthopedic impairmentOther health impairmentSpecific learning disabilitySpeech or language impairmentTraumatic brain injury	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Multiple disabilities	12	267	390.8	519	85.4	11	267	373.7	461	63.4
		2					1				
		75	306	519.2	611	60.3	72	299	472.5	627	63.1
		178	377	517.9	659	53.1	177	369	465.5	600	55.6
		141	300	535.0	684	63.1	139	347	501.6	651	63.4
		1					2				
	Visual impairment	2					2				

Subaraun	Status		Con	nprehensio	on	, 	_		Overall		
Subgroup	Status —	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		7,282	3659	5306.3	6729	475.6	7,322	3294	5337.0	6977	526.7
	Female	3,318	3659	5346.3	6729	467.8	3,346	3510	5392.1	6802	514.4
Gender	Male	3,869	3701	5271.7	6729	479.5	3,881	3294	5289.0	6977	532.1
	Missing	95	3911	5316.7	6391	484.3	95	3562	5352.1	6341	544.7
	American Indian or Alaskan Native	17	4315	5284.0	6071	505.3	17	4111	5263.5	6031	555.0
	Asian	1,474	3659	5407.8	6729	454.8	1,477	3648	5448.2	6828	492.6
	Black or African American	1,411	3659	5322.0	6619	452.5	1,415	3641	5362.4	6802	488.3
Ethnicity	Hispanic or Latino	2,256	3659	5236.5	6729	465.7	2,269	3294	5254.7	6977	526.5
Lumony	Native Hawaiian or Other Pacific Islander	45	4253	5311.3	6183	425.4	45	4106	5362.6	6129	487.9
	Two or More Races	952	3951	5182.9	6619	508.5	957	3649	5186.4	6520	587.8
	White	1,105	3989	5401.0	6729	475.2	1,120	3638	5454.9	6758	502.2
	Other/Unknown	22	4172	5241.0	6077	559.6	22	4050	5266.2	6031	573.4
	Gifted	36	4863	5683.5	6295	405.2	37	4811	5787.5	6428	412.1
Other	Home Schooled	1					1				
Other	IEP	611	3659	4964.8	6463	437.4	614	3294	4931.2	6445	494.4
	Migrant	20	4183	5263.7	6200	596.4	20	4016	5292.0	6331	613.9
	Autism	98	3659	4828.3	6463	500.3	99	3648	4763.2	6445	540.8
	Developmental delay	4					4				
Primary Disability	Emotional disturbance	9					9				
	Hearing Impaired	9					9				
	Intellectual Disability	39	4003	4700.4	5415	311.6	40	3813	4609.0	5421	369.3

Table S1.3: Summative Scale Score Summary by Subgroup - Grade 2 (cont.)

C h	Multiple disabilities Orthopedic impairment Other health impairment Specific learning disability Speech or language		Con	nprehensio	on		_		Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Multiple disabilities	35	3659	4392.5	5183	354.1	35	3294	4296.0	5035	417.1
		5					5				
		77	4054	5026.0	6026	372.9	77	3638	5014.7	6067	430.3
		187	4270	4992.8	6427	336.3	187	4079	4978.3	6132	375.8
	Speech or language impairment	144	4007	5217.5	6295	403.8	145	3873	5210.0	6152	457.5
	Traumatic brain injury	2					2				
	Visual impairment	2					2				

* Scale scores cannot be compared across grade bands.

Cubana									Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		5,814	229	547.2	742	71.9	5,726	228	554.7	766	72.1
	Female	2,590	229	549.9	742	72.0	2,554	228	561.8	766	70.9
Gender	Male	3,198	229	545.3	708	71.6	3,146	228	549.1	733	72.5
	Missing	26	350	522.0	642	81.5	26	398	538.4	644	72.9
	American Indian or Alaskan Native	11	229	497.5	633	115.7	11	228	517.0	657	125.2
	Asian	991	272	558.7	719	68.0	977	345	573.6	733	67.9
	Black or African American	1,202	272	546.9	698	68.5	1,185	265	552.7	722	68.9
Ethnicity	Hispanic or Latino	1,879	229	541.7	708	73.7	1,850	228	546.2	725	73.5
Lumony	Native Hawaiian or Other Pacific Islander	50	421	559.2	689	54.4	50	435	571.9	688	58.2
	Two or More Races	882	272	538.2	697	78.1	865	336	540.9	702	74.3
	White	791	272	556.4	742	67.4	780	373	569.2	766	68.4
	Other/Unknown	8					8				
	Gifted	30	489	593.0	674	47.5	29	467	604.1	697	52.8
Other	IEP	791	229	511.6	695	73.4	706	228	507.5	708	68.9
	Migrant	28	353	546.9	697	96.9	29	395	541.7	702	91.1
	Autism	88	229	455.8	619	96.9	63	228	491.0	658	93.8
	Developmental delay	6					3				
Primary Disability	Emotional disturbance	17	383	526.8	652	61.6	16	402	512.1	622	70.1
inter producinty	Hearing Impaired	8					8				
	Intellectual Disability	41	356	470.3	584	57.7	33	345	467.1	588	55.4
	Multiple disabilities	32	229	380.5	524	61.0	12	228	403.5	766 766 733 644 657 733 722 725 688 702 766 688 702 766 697 708 708 702 658 702	63.2

Table S1.4: Summative Scale Score Summary by Subgroup - Grade 3

Cubaroun	C4-11-1-			Listening			Reading						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	5			-	_	6	-	_	_			
	Other health impairment	111	357	523.3	695	62.5	101	369	503.6	684	64.7		
	Specific learning disability	395	321	521.2	691	56.3	375	378	503.2	708	58.0		
	Speech or language impairment	94	400	564.9	658	47.0	94	384	564.0	661	56.2		
	Traumatic brain injury	2					0						
	Visual impairment	1					0						

Subaraus	Status		Juegreu	Speaking	.00 (001)				Writing		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		5,643	252	573.7	747	75.3	5,701	235	554.1	765	72.6
	Female	2,519	252	578.8	747	75.2	2,547	235	560.9	765	70.8
Gender	Male	3,098	252	569.8	729	74.8	3,128	235	548.7	734	73.5
	Missing	26	310	537.6	657	94.2	26	351	537.9	643	80.3
	American Indian or Alaskan Native	10	252	533.9	668	122.7	11	235	520.9	639	121.3
	Asian	965	298	587.1	730	69.7	971	343	570.8	734	65.9
	Black or African American	1,177	288	574.6	723	67.3	1,176	272	553.6	721	69.3
Ethnicity	Hispanic or Latino	1,840	252	565.9	725	79.7	1,848	235	545.0	727	75.1
Lumony	Native Hawaiian or Other Pacific Islander	50	362	584.7	677	55.3	50	434	575.9	673	53.3
	Two or More Races	845	299	560.0	715	83.7	861	328	540.6	693	76.6
	White	749	301	589.1	747	67.8	777	347	569.5	765	68.1
	Other/Unknown	7					7				
	Gifted	30	523	622.2	712	47.9	29	459	601.3	683	50.1
Other	IEP	709	252	542.5	696	68.9	703	235	506.3	720	70.0
	Migrant	29	377	562.4	715	96.1	28	386	539.9	683	84.5
	Autism	58	252	496.2	651	98.9	58	235	499.9	629	95.9
	Developmental delay	3					3				
Primary Disability	Emotional disturbance	18	307	537.6	629	76.2	16	374	508.9	652	74.9
	Hearing Impaired	7					8				
	Intellectual Disability	33	298	507.8	606	57.5	30	363	458.4	565	55.9
	Multiple disabilities	13	252	418.1	538	93.5	13	235	380.4	765 765 734 643 639 734 721 727 673 693 765 683 765 683 720 683 629 683	59.1

Table S1.4: Summative Scale Score Summary by Subgroup - Grade 3 (cont.)

Cubaroun	Ctatua		:	Speaking			Writing						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	5	-		_	_	5	-	-				
	Other health impairment	105	353	540.8	670	66.5	102	363	503.3	707	71.4		
	Specific learning disability	381	301	547.6	677	58.6	381	349	502.6	720	59.0		
	Speech or language impairment	91	441	583.1	696	47.8	93	368	556.2	648	52.9		
	Traumatic brain injury	1					0						
	Visual impairment	0					0						

Cubana	Ctotus		Con	nprehensio	on				Overall	Max 7156 7156 6805 6184 6224 6932 6794 6737 6570 6727 6570 6678 6678 6678 6637 6638 6637 6727 6638 6638 6633 5638 5123	
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		5,837	3300	5488.1	6729	522.7	5,853	2968	5548.4	7156	571.7
	Female	2,595	3300	5522.9	6729	518.9	2,602	2968	5593.9	7156	563.8
Gender	Male	3,216	3300	5461.2	6729	523.8	3,225	2968	5513.2	6805	574.7
	Missing	26	4189	5343.9	6312	557.7	26	3997	5369.3	6184	656.0
	American Indian or Alaskan Native	11	3300	5179.5	6083	833.0	11	2968	5241.6	6224	951.4
	Asian	995	3659	5601.8	6729	505.0	998	3648	5669.6	6932	538.7
	Black or African American	1,205	3598	5476.1	6729	497.9	1,207	3326	5544.7	6794	536.7
Ethnicity	Hispanic or Latino	1,890	3300	5440.9	6729	530.4	1,897	2968	5489.6	6737	586.4
Lumony	Native Hawaiian or Other Pacific Islander	50	4723	5586.5	6571	420.6	50	4728	5684.5	6570	401.2
	Two or More Races	883	3659	5407.1	6622	552.6	886	3648	5442.9	6727	617.6
	White	795	3659	5563.7	6729	495.6	796	3648	5654.9	7156	532.7
	Other/Unknown	8					8				
	Gifted	30	5049	5829.1	6462	381.9	30	5068	5947.2	6678	357.1
Other	IEP	800	3300	5179.3	6439	513.3	808	2968	5185.7	6687	555.5
	Migrant	30	4206	5454.1	6622	688.3	30	4148	5463.9	6727	737.6
	Autism	90	3300	4851.5	6099	665.9	91	2968	4831.6	6128	723.5
	Developmental delay	6					6				
Primary Disability	Emotional disturbance	17	4379	5243.1	6201	452.6	18	3981	5251.9	6033	510.6
	Hearing Impaired	9					9				
	Intellectual Disability	42	4229	4921.7	5700	410.2	42	3912	4885.8	5638	402.6
	Multiple disabilities	32	3300	4344.7	5072	363.9	34	2968	4272.6	7156 7156 6805 6184 6224 6932 6794 6737 6570 6727 7156 6678 6687 6687 6627 6128 6633 6033	410.5

Table S1.4: Summative Scale Score Summary by Subgroup - Grade 3 (cont.)

	0		Con	nprehensio	on				Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Orthopedic impairment	6	-	-	-	-	6	-	-	-	
	Other health impairment	111	4200	5221.5	6435	439.3	111	4020	5222.7	6623	504.7
	Specific learning disability	399	4098	5220.5	6390	397.5	402	3818	5244.4	6687	431.8
	Speech or language impairment	94	4330	5628.9	6439	391.2	95	4288	5642.9	6389	378.6
	Traumatic brain injury	2					2				
	Visual impairment	1					1				

* Scale scores cannot be compared across grade bands.

Cubana	<u>Ctatus</u>			Listening					Reading		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		4,383	213	526.8	717	76.4	4,288	228	523.6	719	68.7
	Female	1,929	280	529.7	717	75.4	1,897	307	528.2	719	68.0
Gender	Male	2,400	213	524.9	703	76.9	2,338	228	520.4	707	68.8
	Missing	54	348	505.9	711	82.1	53	381	503.4	699	74.5
	American Indian or Alaskan Native	9					9				
	Asian	655	293	544.4	703	74.7	641	362	546.3	707	67.8
	Black or African American	847	213	529.2	701	72.2	832	228	523.8	701	64.8
Ethnicity	Hispanic or Latino	1,547	280	521.2	711	76.2	1,504	345	518.0	700	67.8
Lumony	Native Hawaiian or Other Pacific Islander	30	393	522.5	628	60.7	30	409	521.0	643	61.4
	Two or More Races	681	291	517.2	692	81.0	663	340	511.3	693	69.7
	White	606	220	529.3	699	76.3	601	237	526.8	707	70.1
	Other/Unknown	8					8				
	Gifted	21	453	561.5	670	67.9	21	427	549.3	666	71.0
Other	IEP	816	213	495.2	675	73.8	722	228	490.2	651	59.7
	Migrant	19	368	517.8	652	82.0	18	406	514.0	633	71.1
	Autism	85	213	437.8	644	96.6	59	228	473.6	651	74.7
	Deaf-blindness	1					1				
	Developmental delay	6					5				
Primary Disability	Emotional disturbance	11	441	512.4	583	48.5	11	428	477.8	564	40.1
	Hearing Impaired	7					8				
	Intellectual Disability	51	283	433.7	558	61.1	33	373	437.6	520	39.0

Table S1.5: Summative Scale Score Summary by Subgroup - Grade 4

Subaroun	Status			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Multiple disabilities	23	280	367.7	478	42.2	9			-	
	Orthopedic impairment	5					4				
	Other health impairment	102	316	496.2	659	63.2	93	313	486.1	647	63.9
	Specific learning disability	466	354	513.1	675	58.1	444	374	493.8	649	54.0
	Speech or language impairment	53	368	543.9	634	48.5	50	435	534.5	608	43.5
	Traumatic brain injury	3					2				
	Visual impairment	3					2				

Subarous	Status –		Juogrou	Speaking	e i (con				Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		4,242	237	547.0	723	78.8	4,264	221	519.9	722	75
	Female	1,880	273	552.9	723	78.6	1,880	305	526.8	712	73
Gender	Male	2,309	237	542.7	712	78.5	2,330	221	515.0	699	75
	Missing	53	340	522.7	698	88.4	54	319	497.4	722	89
	American Indian or Alaskan Native	9					8				
	Asian	632	282	563.2	718	69.8	642	330	541.4	694	70
	Black or African American	824	237	550.9	698	72.8	827	221	522.8	698	71
Ethnicity	Hispanic or Latino	1,493	277	539.9	700	81.1	1,497	315	512.7	722	76
Lumony	Native Hawaiian or Other Pacific Islander	29	410	551.5	631	62.9	30	366	529.6	631	61
	Two or More Races	658	285	534.3	723	86.1	662	315	505.8	680	79
	White	589	263	556.1	717	78.1	590	230	526.3	699	74
	Other/Unknown	8					8				
	Gifted	19	490	585.8	669	53.8	21	405	539.4	659	66
Other	IEP	739	237	525.4	675	71.5	729	221	484.6	659	67
	Migrant	19	362	524.1	618	75.8	19	368	495.8	637	81
	Autism	53	237	473.1	622	84.0	56	221	459.1	641	86
	Deaf-blindness	1					1				
	Developmental delay	6					5				
Primary Disability	Emotional disturbance	11	439	530.0	608	46.7	11	386	475.5	619	65
	Hearing Impaired	8					8				
	Intellectual Disability	40	296	441.3	561	66.2	35	327	419.5	518	55

Table S1.5: Summative Scale Score Summary by Subgroup - Grade 4 (cont.)

Curb and an	Ctotus		ļ	Speaking					Writing		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Multiple disabilities	6	-		-		8	-		-	
	Orthopedic impairment	5					5				
	Other health impairment	97	279	523.6	675	78.3	95	320	479.1	639	73.3
	Specific learning disability	458	298	539.2	668	57.6	449	348	492.5	659	58.6
	Speech or language impairment	49	359	561.6	650	49.0	51	391	522.0	617	44.2
	Traumatic brain injury	2					2				
	Visual impairment	2					2				

Cubana	Ctatus		Cor	nprehensio	on	,			Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		4,402	3298	5317.0	6878	531.1	4,419	2892	5326.3	6800	582.8
	Female	1,937	3632	5338.5	6878	526.6	1,943	3538	5370.3	6800	574.1
Gender	Male	2,411	3298	5303.2	6741	533.8	2,422	2892	5294.8	6664	585.6
	Missing	54	4160	5167.4	6558	540.2	54	3856	5157.7	6613	653.5
	American Indian or Alaskan Native	9					9				
	Asian	658	3734	5465.5	6741	541.3	658	3730	5478.8	6608	557.2
	Black or African American	848	3298	5320.7	6878	500.0	848	2892	5346.8	6606	546.4
Ethnicity	Hispanic or Latino	1,554	3632	5279.8	6585	524.3	1,565	3616	5275.3	6613	586.1
Lumony	Native Hawaiian or Other Pacific Islander	30	4471	5262.2	6228	433.1	30	4251	5352.8	6036	465.1
	Two or More Races	682	3715	5245.8	6686	548.0	686	3724	5226.9	6671	612.8
	White	613	3298	5328.4	6741	532.8	615	3005	5374.1	6664	580.6
	Other/Unknown	8					8				
	Gifted	21	4739	5583.3	6514	554.2	21	4657	5573.5	6455	511.8
Other	IEP	821	3298	5070.5	6413	495.6	826	2892	5050.8	6402	536.9
	Migrant	19	4473	5315.0	6428	585.4	19	4202	5207.9	6073	597.7
	Autism	86	3298	4736.8	6305	652.0	87	2892	4654.8	6215	673.0
	Deaf-blindness	1					1				
	Developmental delay	6					7				
Primary Disability	Emotional disturbance	11	4683	5103.9	5541	291.4	11	4578	5090.5	5797	369.3
	Hearing Impaired	8					8				
	Intellectual Disability	51	3665	4698.2	5537	380.8	51	3673	4564.1	5385	421.1

Table S1.5: Summative Scale Score Summary by Subgroup - Grade 4 (cont.)

Cubara	Ctotus		Con	nprehensio	on				Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Multiple disabilities	23	3632	4264.8	5230	315.2	23	3616	4159.7	4996	332.2
	Orthopedic impairment	5					5				
	Other health impairment	102	3779	5076.3	6345	428.8	102	3638	5062.6	6229	521.5
	Specific learning disability	469	4223	5163.8	6387	407.4	472	4073	5179.1	6402	423.8
	Speech or language impairment	53	4746	5463.3	6413	349.5	53	4520	5431.7	5982	311.6
	Traumatic brain injury	3					3				
	Visual impairment	3					3				

* Scale scores cannot be compared across grade bands.

Cubana	Ctotus			Listening					Reading		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,951	213	538.1	718	82.6	3,829	228	539.9	719	73.4
	Female	1,790	258	540.5	704	82.4	1,748	344	543.4	712	72.8
Gender	Male	2,109	213	535.9	718	82.5	2,030	228	536.7	719	73.9
	Missing	52	277	541.1	693	94.3	51	393	543.4	703	75.8
	American Indian or Alaskan Native	10	354	493.9	627	81.5	10	388	511.8	640	73.7
	Asian	582	258	548.7	718	80.4	564	367	552.4	719	71.6
	Black or African American	773	213	531.8	699	84.7	753	228	534.0	718	74.7
Ethnicity	Hispanic or Latino	1,428	258	535.5	704	82.2	1,376	330	538.7	709	73.3
Lumony	Native Hawaiian or Other Pacific Islander	30	344	531.7	673	86.3	27	370	541.1	675	65.6
	Two or More Races	625	258	534.1	692	81.7	606	364	531.0	681	70.3
	White	495	258	547.9	692	82.6	485	331	548.6	711	75.8
	Other/Unknown	8					8				
	Gifted	12	406	581.7	666	77.2	13	465	575.9	675	64.7
Other	IEP	810	213	514.1	685	78.6	701	228	516.3	709	63.2
	Migrant	17	378	522.7	654	88.1	16	414	539.2	669	84.6
	Autism	57	213	449.0	685	95.8	31	228	492.5	661	84.2
	Developmental delay	6					4				
Primary Disability	Emotional disturbance	15	371	512.3	645	82.6	15	409	500.7	662	79.5
, and y broughty	Hearing Impaired	6					9				
	Intellectual Disability	63	314	446.4	612	60.7	40	378	456.8	585	47.4
	Multiple disabilities	37	258	360.1	536	63.1	5				

Table S1.6: Summative Scale Score Summary by Subgroup - Grade 5

Cubaroun	C 4-4-1			Listening					Reading		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Orthopedic impairment	6	-		-		5	-			
	Other health impairment	102	354	521.7	685	67.4	95	354	514.9	674	63.7
	Specific learning disability	481	371	536.7	672	57.3	460	367	522.6	709	57.9
	Speech or language impairment	28	373	563.9	677	66.9	28	452	558.1	669	55.5
	Traumatic brain injury	6					3				
	Visual impairment	3					3				

Subgroup	Status –			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		3,801	237	557.3	742	82.5	3,799	221	536.5	724	79
	Female	1,717	283	561.5	742	82.6	1,730	304	541.7	720	7
Gender	Male	2,033	237	554.2	729	82.1	2,018	221	532.0	724	7
	Missing	51	318	543.6	695	89.1	51	356	536.8	663	8
	American Indian or Alaskan Native	10	361	508.2	630	97.8	10	355	503.0	659	9
	Asian	558	285	567.5	705	74.3	563	332	548.5	720	7
	Black or African American	754	237	554.4	742	82.3	750	221	531.2	711	8
Ethnicity	Hispanic or Latino	1,379	282	554.4	725	83.9	1,356	325	533.9	714	8
Lumony	Native Hawaiian or Other Pacific Islander	29	336	541.3	650	93.0	28	344	541.3	675	7
	Two or More Races	589	288	551.8	729	85.7	603	304	529.3	708	-
	White	474	297	566.6	712	81.9	481	328	546.6	724	-
	Other/Unknown	8					8				
	Gifted	13	463	586.8	668	54.7	13	460	563.8	632	:
Other	IEP	726	237	548.8	719	68.7	707	221	516.1	695	(
	Migrant	16	385	550.6	714	106.7	16	354	523.0	646	ļ
	Autism	32	237	505.4	719	98.3	30	221	483.7	667	ę
	Developmental delay	4					4				
Primary Disability	Emotional disturbance	15	410	544.2	651	72.9	16	354	496.2	640	i
, <u> </u>	Hearing Impaired	7					9				
	Intellectual Disability	50	336	482.8	634	66.2	39	358	451.7	595	į
	Multiple disabilities	9					5				

Table S1.6: Summative Scale Score Summary by Subgroup - Grade 5 (cont.)

Cubarour	Ctatura		:	Speaking					Writing		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Orthopedic impairment	4	-		-		4		_	_	
	Other health impairment	94	340	544.9	691	65.0	95	339	512.9	691	66.6
	Specific learning disability	472	373	562.3	712	57.1	468	343	524.5	695	58.0
	Speech or language impairment	29	494	571.4	638	40.0	28	453	559.1	679	45.6
	Traumatic brain injury	4					3				
	Visual impairment	3					3				

0	04-4		Cor	nprehensio	on				Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		3,965	3298	5411.3	6878	581.0	3,994	2892	5429.0	6774	626.8
	Female	1,798	3482	5426.1	6878	575.7	1,806	3505	5461.2	6726	624.
Gender	Male	2,115	3298	5397.4	6776	582.8	2,136	2892	5402.2	6774	626.
	Missing	52	3622	5461.5	6878	678.2	52	3629	5410.1	6640	703.
	American Indian or Alaskan Native	10	4233	5145.3	5973	521.1	10	3994	5134.3	6211	681.
	Asian	586	3482	5494.1	6878	578.0	588	3505	5514.9	6771	599.
	Black or African American	775	3298	5362.5	6779	590.4	778	2892	5386.5	6774	640.
Ethnicity	Hispanic or Latino	1,432	3482	5401.6	6878	577.9	1,445	3505	5413.5	6726	625.
Lumony	Native Hawaiian or Other Pacific Islander	30	4148	5354.2	6342	563.0	31	3910	5374.2	6371	647.
	Two or More Races	626	3482	5366.7	6634	556.5	630	3505	5381.3	6722	621.
	White	498	3482	5474.3	6758	595.3	504	3505	5501.2	6737	631.
	Other/Unknown	8					8				
	Gifted	13	4625	5767.8	6878	624.2	13	4671	5717.4	6318	472.
Other	IEP	814	3298	5206.0	6665	547.8	825	2892	5225.5	6592	569
	Migrant	17	4464	5360.7	6314	599.4	17	4227	5367.7	6488	723.
	Autism	57	3298	4800.7	6300	644.1	57	2892	4774.9	6586	691.
	Developmental delay	6					6				
Primary Disability	Emotional disturbance	15	4383	5217.7	6654	652.9	16	4182	5208.4	6296	616
· · · · · · · · · · · · · · · · · · ·	Hearing Impaired	9					9				
	Intellectual Disability	63	4047	4760.7	5819	393.3	65	3910	4724.0	5976	423
	Multiple disabilities	38	3482	4229.8	5351	460.9	38	3505	4172.9	5384	428.

Table S1.6: Summative Scale Score Summary by Subgroup - Grade 5 (cont.)

0	04-4		Con	nprehensio	on				Overall		
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
	Orthopedic impairment	6	-	-	-	-	6	-	-	-	
	Other health impairment	102	4151	5259.2	6534	488.3	103	3974	5271.9	6454	508.9
	Specific learning disability	481	4412	5348.0	6498	424.4	486	4170	5395.1	6592	425.9
	Speech or language impairment	28	4687	5603.1	6665	502.2	29	4779	5619.7	6335	355.1
	Traumatic brain injury	6					6				
	Visual impairment	3					4				

* Scale scores cannot be compared across grade bands.

Cubana	Ctotus			Listening					Reading		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max 743 727 743 617 697 699 708 708 699 708 699 708 699 617 699 635	SD
Total		3,343	232	520.7	721	72.0	3,247	247	522.1	743	63.8
	Female	1,450	232	519.7	700	70.2	1,420	247	521.6	727	62.0
Gender	Male	1,863	268	521.9	721	73.5	1,797	291	522.9	743	65.3
	Missing	30	353	495.1	602	63.9	30	391	504.9	617	56.2
	American Indian or Alaskan Native	8					8				
	Asian	471	232	535.2	692	75.7	459	247	539.1	697	68.0
	Black or African American	683	268	520.2	692	67.8	663	380	521.4	699	61.7
Ethnicity	Hispanic or Latino	1,166	268	514.4	683	74.3	1,129	343	516.4	708	63.6
Lumony	Native Hawaiian or Other Pacific Islander	23	422	515.5	613	57.5	23	435	509.2	592	56.6
	Two or More Races	533	268	514.0	658	69.6	516	371	514.6	699	59.7
	White	452	356	530.3	721	68.3	443	352	529.3	743	64.3
	Other/Unknown	7					6				
	Gifted	8					7				
Other	Home Schooled	1					1				
Other	IEP	691	232	499.3	650	66.4	618	247	500.1	675	52.9
	Migrant	16	370	488.4	658	92.0	17	415	512.2	674	82.7
	Autism	49	268	442.9	619	85.8	31	389	487.6	620	68.3
	Developmental delay	4					1				
Primary Disability	Emotional disturbance	18	383	491.8	640	63.5	16	408	503.7	675	62.9
	Hearing Impaired	4					6				
	Intellectual Disability	62	340	455.7	593	57.5	48	403	470.2	635	54.3

Table S1.7: Summative Scale Score Summary by Subgroup - Grade 6

Subaroun	Status		l	Listening			Reading						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Multiple disabilities	27	232	362.5	479	59.3	13	247	414.4	492	68.9		
	Other health impairment	80	358	507.6	605	51.1	76	392	499.3	624	49.0		
	Specific learning disability	429	383	520.0	650	48.8	407	402	507.4	675	46.6		
	Speech or language impairment	13	420	520.8	604	52.9	14	445	519.6	614	58.4		
	Traumatic brain injury	5					5						
	Visual impairment	2					2						

Subgroup	Status			Speaking			Writing					
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max 725 725 698 579 703 725 687 621 668 698 657 657 612 618 622	SD	
Total		3,210	268	550.7	745	72.9	3,235	243	514.4	725	72	
	Female	1,402	268	553.8	740	72.5	1,416	243	518.2	725	7′	
Gender	Male	1,778	294	548.7	745	73.2	1,790	288	511.9	698	73	
	Missing	30	336	529.3	626	74.5	29	336	490.2	579	62	
	American Indian or Alaskan Native	7					7					
	Asian	450	268	569.2	717	72.7	456	243	530.1	703	7	
	Black or African American	659	313	550.3	700	65.1	665	319	514.8	725	6	
Ethnicity	Hispanic or Latino	1,124	312	542.1	720	78.1	1,126	318	506.1	687	7	
Lumony	Native Hawaiian or Other Pacific Islander	22	471	549.1	643	50.4	23	375	507.6	621	6	
	Two or More Races	513	317	540.3	675	73.6	514	331	506.6	668	7	
	White	429	316	566.4	745	64.4	438	329	527.5	698	6	
	Other/Unknown	6					6					
	Gifted	7					7					
Other	Home Schooled	1					1					
Other	IEP	629	268	535.5	704	63.7	620	243	492.6	657	6	
	Migrant	16	325	495.4	619	97.7	16	342	470.6	687	10	
	Autism	31	349	491.7	606	78.9	32	331	451.4	612	8	
	Developmental delay	2					1					
Primary Disability	Emotional disturbance	16	450	528.0	641	46.9	17	374	491.5	618	5	
	Hearing Impaired	3					5			725 725 698 579 703 703 687 621 668 698 698 698 698 698 612 612		
	Intellectual Disability	54	326	485.2	595	64.3	50	340	446.9		6	

Table S1.7: Summative Scale Score Summary by Subgroup - Grade 6 (cont.)

Subaroun	Status		:	Speaking				Writing						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD			
	Multiple disabilities	12	268	412.4	522	78.6	12	243	356.8	466	60.2			
	Other health impairment	76	316	535.1	627	54.4	76	333	494.1	596	62.1			
	Specific learning disability	417	356	551.0	704	51.4	408	349	506.1	657	51.9			
	Speech or language impairment	12	409	533.2	632	73.5	13	387	513.7	583	59.5			
	Traumatic brain injury	4					5							
	Visual impairment	2					2							

Subaroup	Status		Con	nprehensio	on		_		Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		3,358	3361	5286.8	6938	501.0	3,365	3052	5308.3	6932	546.7
	Female	1,455	3361	5272.8	6665	478.1	1,458	3052	5324.1	6834	531.6
Gender	Male	1,873	3553	5299.9	6938	518.3	1,877	3402	5298.8	6932	558.7
	Missing	30	4171	5145.1	6161	457.9	30	4109	5135.8	5807	477.5
	American Indian or Alaskan Native	8					8				
	Asian	472	3361	5397.2	6580	540.0	474	3052	5429.4	6636	575.9
	Black or African American	685	3553	5284.1	6711	482.9	686	3560	5307.9	6597	507.4
Ethnicity	Hispanic or Latino	1,172	3553	5249.2	6938	505.5	1,175	3560	5256.3	6557	566.0
Lumony	Native Hawaiian or Other Pacific Islander	23	4576	5215.1	5815	382.4	23	4580	5260.8	5950	416.8
	Two or More Races	537	3553	5234.3	6622	474.1	537	3560	5240.0	6429	528.5
	White	454	4177	5336.9	6938	488.7	455	3870	5396.5	6932	515.9
	Other/Unknown	7					7				
	Gifted	8					8				
Other	Home Schooled	1					1				
Other	IEP	699	3361	5110.9	6711	443.4	701	3052	5114.3	6265	495.9
	Migrant	17	4395	5191.9	6258	625.3	17	4068	5062.6	6355	734.6
	Autism	49	3553	4794.4	6043	592.6	49	3560	4717.3	6001	627.8
	Developmental delay	4					4				
Primary Disability	Emotional disturbance	18	4467	5129.4	6476	452.4	18	4387	5121.2	6265	402.0
	Hearing Impaired	6					6				
	Intellectual Disability	63	4223	4852.1	6326	391.9	64	4027	4766.1	5834	444.6

Table S1.7: Summative Scale Score Summary by Subgroup - Grade 6 (cont.)

Subaroun	Status		Con	nprehensio	on		Overall						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Multiple disabilities	28	3361	4266.3	5033	426.3	28	3052	4148.7	5011	448.5		
	Other health impairment	80	4299	5153.8	5928	341.2	80	3870	5160.1	5840	404.6		
	Specific learning disability	432	4471	5232.5	6711	350.6	433	4189	5268.2	6242	363.8		
	Speech or language impairment	14	4726	5275.7	5809	375.5	14	4471	5296.1	5919	441.4		
	Traumatic brain injury	5					5						
	Visual impairment	2					2						

* Scale scores cannot be compared across grade bands.

Cubana	Ctotus			Listening					Reading		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max 736 732 736 667 689 736 736 689 736 737 689 701 711 689 689 697 645 564 487	SD
Total		3,224	261	526.2	723	78.1	3,169	263	529.5	736	69.1
	Female	1,434	266	526.1	708	78.9	1,415	322	532.8	732	69.5
Gender	Male	1,772	261	526.7	723	77.1	1,737	263	527.1	736	68.5
	Missing	18	267	490.9	634	104.2	17	276	500.9	667	94.0
	American Indian or Alaskan Native	5					5				
	Asian	435	281	540.8	691	69.2	429	392	543.8	689	65.1
	Black or African American	698	268	532.5	723	74.8	689	367	537.5	736	66.7
Ethnicity	Hispanic or Latino	1,143	261	517.7	708	81.3	1,113	263	520.2	719	69.8
Lumony	Native Hawaiian or Other Pacific Islander	31	372	533.4	679	70.5	31	367	530.4	680	68.6
	Two or More Races	522	268	510.4	702	80.5	514	344	515.6	701	69.8
	White	388	353	545.1	694	73.2	386	386	544.8	711	67.6
	Other/Unknown	2					2				
	Gifted	9					9				
Other	IEP	633	268	515.6	656	68.0	590	390	515.5	689	56.3
	Migrant	11	395	522.6	677	98.2	11	413	528.8	697	101.3
	Autism	25	281	467.7	618	75.3	19	404	503.0	645	68.0
	Developmental delay	5					3				
Primary Disability	Emotional disturbance	8					7				
	Hearing Impaired	3					8				
	Intellectual Disability	52	363	458.8	581	56.6	40	392	473.9	564	46.9
	Multiple disabilities	22	268	395.5	493	53.8	12	393	432.1	736 732 736 667 689 736 719 680 701 711 711 680 701 711 680 689 697 645 645	27.3

Table S1.8: Summative Scale Score Summary by Subgroup - Grade 7

Cubarour	Ctatura			Listening			Reading						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	4			-	_	4	-	_	_			
	Other health impairment	100	288	518.7	652	64.4	95	390	515.9	658	51.7		
	Specific learning disability	387	355	534.6	656	53.8	376	396	523.2	689	52.4		
	Speech or language impairment	13	420	542.5	629	61.2	13	450	539.6	645	56.1		
	Traumatic brain injury	9					8						
	Visual impairment	3					3						

Subarous	Statue		Juogrou	Speaking	e (con		Writing					
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD	
Total		3,097	278	551.5	739	81.1	3,131	260	521.7	748	80	
	Female	1,377	292	555.4	739	83.7	1,399	284	527.4	710	8	
Gender	Male	1,704	278	548.6	713	78.4	1,714	260	517.4	748	7	
	Missing	16	286	524.1	644	115.5	18	293	498.3	642	10:	
	American Indian or Alaskan Native	4					5					
	Asian	422	293	571.3	708	70.2	425	337	535.4	688	7	
	Black or African American	667	318	559.6	713	72.2	677	334	531.2	748	7	
Ethnicity	Hispanic or Latino	1,109	278	541.5	739	87.7	1,102	260	512.6	702	8	
Lumony	Native Hawaiian or Other Pacific Islander	30	396	552.1	658	57.9	31	336	525.2	671	7	
	Two or More Races	494	313	529.5	688	86.4	508	329	503.3	700	8	
	White	369	323	574.4	715	68.2	381	329	541.1	692	7	
	Other/Unknown	2					2					
	Gifted	9					9					
Other	IEP	589	293	548.4	708	66.3	591	300	512.3	661	6	
	Migrant	10	344	525.1	672	115.0	11	341	502.6	682	11	
	Autism	21	293	517.7	617	87.1	19	356	494.3	615	7	
	Developmental delay	3					3					
Primary Disability	Emotional disturbance	6					6					
	Hearing Impaired	3					5					
	Intellectual Disability	43	320	502.4	604	69.3	43	329	448.8	748 710 748 642 688 748 702 671 700 692 692 661 682	7	
	Multiple disabilities	13	302	416.0	537	74.7	13	300	391.6		7	

Table S1.8: Summative Scale Score Summary by Subgroup - Grade 7 (cont.)

Cubaroun	C4-11-1-		:	Speaking			Writing						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	3	-		-	_	4	-	_				
	Other health impairment	98	324	551.8	646	63.5	93	352	512.1	630	65.1		
	Specific learning disability	376	328	561.6	708	54.7	380	342	525.6	661	55.5		
	Speech or language impairment	11	461	554.6	629	52.0	13	452	537.1	649	54.5		
	Traumatic brain injury	6					7						
	Visual impairment	3					3						

C h	Ctotus		Con	nprehensio	on	,			Overall	Max 6865 6820 6865 6274 6640 6865 6865 6865 6863 66640 6865 6865 6865 6865 6865 6865 6865 6865 6661 6668 6668 6668 6095 6446 6095 5670 5112	
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		3,238	3480	5334.6	6824	534.8	3,253	3171	5354.4	6865	601.3
	Female	1,440	3553	5336.9	6802	534.7	1,445	3437	5381.2	6820	611.8
Gender	Male	1,780	3531	5335.0	6824	532.8	1,790	3171	5335.2	6865	589.4
	Missing	18	3480	5109.6	6225	699.9	18	3312	5124.2	6274	820.4
	American Indian or Alaskan Native	5					5				
	Asian	438	3732	5438.0	6615	494.6	439	3473	5481.2	6640	531.5
	Black or African American	700	3553	5381.8	6761	523.8	703	3560	5414.8	6865	562.4
Ethnicity	Hispanic or Latino	1,146	3480	5272.0	6824	541.0	1,153	3171	5286.6	6820	628.9
	Native Hawaiian or Other Pacific Islander	31	4240	5373.1	6525	511.6	31	4009	5384.3	6429	515.7
	Two or More Races	526	3553	5232.4	6703	542.3	527	3560	5205.7	6661	630.9
	White	390	4169	5456.4	6824	522.0	393	3966	5505.3	6668	551.4
	Other/Unknown	2					2				
	Gifted	9					9				
Other	IEP	639	3553	5229.5	6723	468.8	644	3473	5256.0	6382	508.5
	Migrant	11	4498	5363.2	6546	731.9	11	4111	5252.0	6446	826.5
	Autism	25	3732	4949.1	6138	529.4	25	3473	4967.7	6095	612.3
	Developmental delay	5					5				
Primary Disability	Emotional disturbance	8					8				
,, ,	Hearing Impaired	8					8				
	Intellectual Disability	52	4217	4872.1	5685	354.6	53	3951	4831.6	5670	469.9
	Multiple disabilities	22	3553	4471.9	5045	313.2	22	3560	4327.8	6865 6820 6865 6274 6640 6865 6820 6429 6661 6668 6668 6668 6668 6668 6095	379.4

Table S1.8: Summative Scale Score Summary by Subgroup - Grade 7 (cont.)

0	04-4		Con	nprehensio	on		Overall						
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	4	-	-	-	-	4	-	-	-			
	Other health impairment	101	3699	5252.5	6447	446.7	103	3690	5287.6	6159	472.3		
	Specific learning disability	387	4359	5342.8	6723	396.2	389	4118	5394.0	6382	398.5		
	Speech or language impairment	13	4750	5441.2	6136	434.3	13	4711	5441.9	6055	429.8		
	Traumatic brain injury	9					9						
	Visual impairment	3					3						

* Scale scores cannot be compared across grade bands.

Subarous	Statua			Listening			Reading				
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		3,349	232	546.2	755	85.1	3,267	247	551.5	780	77.7
	Female	1,417	268	547.7	716	84.5	1,391	362	554.1	738	76.8
Gender	Male	1,899	232	545.5	755	85.4	1,843	247	549.8	780	78.4
	Missing	33	331	521.5	684	92.8	33	417	533.0	690	73.7
	American Indian or Alaskan Native	6					6				
	Asian	493	370	564.7	755	74.9	486	394	568.5	780	73.9
	Black or African American	662	325	549.1	735	82.0	659	367	552.3	747	78.1
Ethnicity	Hispanic or Latino	1,196	268	540.7	742	87.8	1,151	362	545.9	747	77.2
	Native Hawaiian or Other Pacific Islander	25	405	548.6	694	69.5	24	409	549.3	697	76.3
	Two or More Races	559	301	533.2	711	92.0	549	367	540.6	719	81.9
	White	402	296	554.0	713	78.5	386	362	561.8	726	70.8
	Other/Unknown	6					6				
	Gifted	6					6				
Other	IEP	595	268	534.4	685	75.7	541	383	535.3	703	67.5
	Migrant	16	382	514.2	646	85.7	16	418	523.7	673	68.7
	Autism	32	268	486.8	649	95.6	26	416	523.4	663	73.6
	Developmental delay	6					4				
Primary Disability	Emotional disturbance	13	442	539.3	645	59.9	13	456	539.1	630	62.3
, <u> </u>	Hearing Impaired	3					6				
	Intellectual Disability	53	328	470.1	644	62.7	34	401	477.7	627	54.4
	Multiple disabilities	24	268	405.1	537	58.6	12	384	440.4	780 690 780 747 697 719 726 703 673 663 663	32.9

Table S1.9: Summative Scale Score Summary by Subgroup - Grade 8

Cubana	C totuo			Listening					Reading		
Subgroup	Status Orthopedic impairment Other health impairment Specific learning disability Speech or language impairment	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
		4	-		-		4		_	-	
		73	371	540.3	667	69.2	70	399	542.4	689	65.8
		377	373	555.2	685	61.5	363	383	543.8	703	64.1
		5					5				
	Traumatic brain injury	1					1				
	Visual impairment	2					1				

Subgroup	Status			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,222	268	567.8	766	83.3	3,254	243	542.1	776	8
	Female	1,357	309	572.7	740	84.4	1,386	317	547.2	744	8
Gender	Male	1,833	268	564.3	766	82.5	1,836	243	538.6	776	1
	Missing	32	402	558.4	687	69.5	32	332	527.0	697	i
	American Indian or Alaskan Native	6					6				
	Asian	479	322	586.0	766	75.2	481	346	555.4	776	
	Black or African American	632	319	571.6	751	76.4	648	320	546.4	734	
Ethnicity	Hispanic or Latino	1,149	309	561.8	740	86.0	1,154	317	536.3	757	
Lumeny	Native Hawaiian or Other Pacific Islander	24	411	563.3	658	61.0	25	360	546.2	776 744 776 697 776 776 734	
	Two or More Races	542	314	549.8	730	94.0	547	321	526.6	732	
	White	384	316	583.1	738	71.1	387	325	558.6	744	
	Other/Unknown	6					6			776 744 697 776 776 734 757 702 732 732 744 637 667 637 667 635 635	
	Gifted	7					6				
Other	IEP	544	316	559.5	708	69.8	538	320	531.0	694	
	Migrant	12	359	541.8	691	99.1	16	386	511.3	637	
	Autism	26	339	528.5	638	85.7	23	360	509.3	667	
	Developmental delay	5					4				
Primary Disability	Emotional disturbance	13	434	551.7	643	59.7	13	411	515.1	635	
	Hearing Impaired	3					5				
	Intellectual Disability	44	334	493.5	655	69.9	37	320	465.7	615	
	Multiple disabilities	11	316	439.5	554	80.8	11	324	403.1	521	

Table S1.9: Summative Scale Score Summary by Subgroup - Grade 8 (cont.)

Cubarour	C4-11-1-			Speaking					Writing		
Subgroup	StatusOrthopedic impairmentOther health impairmentSpecific learning disabilitySpeech or language impairment	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
		4		_			3		_	-	
		70	363	563.5	680	74.9	70	388	543.2	694	67.9
		362	319	572.9	708	59.8	367	331	542.1	686	64.1
		4					3				
	Traumatic brain injury	0					0				
	Visual impairment	1					1				

Culture	Ctotus		Cor	nprehensio	on	,			Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		3,366	3361	5489.2	6938	598.5	3,382	3052	5509.8	7242	648.7
	Female	1,428	3553	5493.1	6938	583.1	1,434	3560	5539.1	6875	645.7
Gender	Male	1,905	3361	5489.5	6938	609.6	1,915	3052	5489.8	7242	650.5
	Missing	33	4354	5308.4	6665	598.6	33	4143	5396.0	6520	637.1
	American Indian or Alaskan Native	6					6				
	Asian	496	4282	5627.6	6761	558.4	499	3992	5642.3	7242	583.8
	Black or African American	669	3955	5501.5	6938	590.9	671	3872	5529.5	7018	622.7
Ethnicity	Hispanic or Latino	1,199	3553	5448.8	6938	601.5	1,205	3560	5467.6	6938	663.9
Lumony	Native Hawaiian or Other Pacific Islander	25	4513	5495.1	6552	529.0	25	4248	5519.7	6504	541.4
	Two or More Races	560	3783	5412.9	6825	632.8	561	3770	5402.1	6720	711.7
	White	405	3753	5530.3	6825	563.6	409	3745	5594.4	6875	584.9
	Other/Unknown	6					6				
	Gifted	6					7				
Other	IEP	603	3553	5370.0	6824	549.3	609	3560	5383.7	6554	567.1
	Migrant	16	4382	5278.3	6532	573.8	16	4263	5282.2	6356	635.0
	Autism	32	3553	5114.8	6610	703.9	33	3560	5074.4	6300	704.3
	Developmental delay	6					7				
Primary Disability	Emotional disturbance	14	4801	5478.3	6406	502.0	14	4708	5391.4	6153	455.8
	Hearing Impaired	6					6				
	Intellectual Disability	54	4155	4934.1	6169	415.8	57	3906	4926.7	6214	482.4
	Multiple disabilities	26	3553	4530.9	5289	375.8	27	3560	4467.8	7242 6520 7242 7018 6938 6504 6720 6875 6875 6356 6356 6300 6153	424.4

Table S1.9: Summative Scale Score Summary by Subgroup - Grade 8 (cont.)

0	04-4		Con	nprehensio	on				Overall		
Subgroup	Status Orthopedic impairment Other health impairment Specific learning disability Speech or language impairment	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
		4			_	_	4	-		_	
		74	4304	5428.1	6429	499.9	74	4194	5475.9	6448	522.8
	Other health impairment Specific learning disability	377	4373	5506.4	6824	473.7	378	3915	5533.3	6554	467.6
		5					5				
	Traumatic brain injury	1					1				
	Speech or language impairment Traumatic brain	2					2				

* Scale scores cannot be compared across grade bands.

Subaroun	Status			Listening			Reading				
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		4,157	253	520.7	762	78.5	4,149	258	520.8	777	71.0
	Female	1,761	270	522.2	762	78.2	1,754	287	523.0	777	69.5
Gender	Male	2,364	253	519.3	727	78.5	2,360	258	519.0	743	71.8
	Missing	32	388	533.5	671	89.4	35	413	534.7	674	81.4
	American Indian or Alaskan Native	3					3				
	Asian	551	253	555.3	718	68.6	551	258	553.0	734	67.5
	Black or African American	982	270	524.3	762	74.7	990	287	523.9	777	67.3
Ethnicity	Hispanic or Latino	1,346	253	509.2	714	80.2	1,333	258	509.9	719	70.8
Lumony	Native Hawaiian or Other Pacific Islander	21	388	536.3	635	62.9	20	412	527.8	625	60.9
	Two or More Races	797	317	501.7	727	79.6	803	350	504.7	743	70.1
	White	443	362	537.2	707	73.8	435	340	535.3	714	69.8
	Other/Unknown	14	409	535.7	656	70.9	14	428	535.1	659	73.5
	Gifted	7					7				
Other	IEP	587	253	514.9	714	66.8	560	258	510.1	712	57.7
	Migrant	14	393	517.2	688	97.2	14	413	530.0	686	87.7
	Autism	26	323	481.6	610	70.7	21	364	488.5	645	65.1
	Deaf-blindness	3					3				
	Developmental delay	9					7				
Primary Disability	Emotional disturbance	8					8				
	Hearing Impaired	8					14	443	516.4	590	46.4
	Intellectual Disability	49	383	477.9	601	45.6	44	395	467.5	583	39.9

Table S1.10: Summative Scale Score Summary by Subgroup - Grade 9

Cubara	Ct =t::=			Listening					Reading		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Multiple disabilities	20	253	391.2	566	80.8	6	_			
	Orthopedic impairment	4					4				
	Other health impairment	92	393	525.4	714	64.1	90	416	516.7	712	58.2
	Specific learning disability	356	359	530.2	666	54.1	352	401	519.1	698	50.9
	Speech or language impairment	9					9				
	Traumatic brain injury	4					4				
	Visual impairment	3					3				

Subarous	Status		Subgro	Speaking	<i>ue ></i> (<i>ee</i>				Writing		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		4,095	297	545.4	723	78.2	4,110	263	511.8	749	81
	Female	1,735	306	550.2	710	76.7	1,743	278	516.3	749	80
Gender	Male	2,328	297	541.7	723	79.0	2,335	263	508.2	710	81
	Missing	32	347	556.2	671	87.0	32	362	526.7	646	95
	American Indian or Alaskan Native	4					3				
	Asian	539	297	579.0	710	61.4	542	263	544.6	710	65
	Black or African American	970	306	553.5	707	66.1	974	278	517.5	749	74
Ethnicity	Hispanic or Latino	1,305	297	531.9	723	85.6	1,326	263	501.0	707	85
Limitity	Native Hawaiian or Other Pacific Islander	19	346	557.0	644	74.7	19	345	527.0	620	73
	Two or More Races	805	326	522.9	693	83.0	799	319	490.3	695	8
	White	439	343	565.9	708	67.9	434	335	529.4	699	74
	Other/Unknown	14	469	574.3	640	55.2	13	422	526.9	623	69
	Gifted	6					7				
Other	IEP	561	297	547.2	669	66.1	548	263	514.2	707	6
	Migrant	13	358	540.6	679	89.3	13	358	516.8	655	104
	Autism	20	357	523.8	636	84.0	19	317	469.3	595	77
	Deaf-blindness	3					3				
	Developmental delay	9					6				
rimary Disability	Emotional disturbance	6					8				
	Hearing Impaired	8					10	420	514.6	571	5
	Intellectual Disability	48	353	505.9	609	61.9	46	351	469.1	749 707 620 695 699 623 707 655 595	62

Table S1.10: Summative Scale Score Summary by Subgroup - Grade 9 (cont.)

Quili		:	Speaking			Writing					
Subgroup Statu	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
Multiple disa	bilities 8					5			-		
Orthope impairm						3					
Other he impairm		349	554.3	662	63.9	89	377	525.6	707	59.6	
Specific lea disabili		341	559.1	669	53.8	349	338	526.5	641	55.2	
Speech or la impairm						9					
Traumatic injury	· · /					4					
Visual impa	irment 3					3					

<u>Cubarroun</u>	Ctotus		Cor	nprehensio	on	,			Overall		
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		4,221	3505	5295.9	7177	545.2	4,293	3235	5302.1	7064	598.4
	Female	1,785	3676	5301.7	7177	536.8	1,811	3368	5327.5	7064	595.1
Gender	Male	2,401	3505	5290.0	7092	550.3	2,447	3235	5282.0	6808	599.0
	Missing	35	4513	5399.6	6616	618.9	35	4115	5394.0	6336	674.7
	American Indian or Alaskan Native	3					4				
	Asian	566	3505	5538.5	7031	518.3	570	3235	5565.0	6647	509.1
	Black or African American	1,005	3676	5314.5	7177	528.0	1,037	3368	5342.2	7064	550.6
Ethnicity	Hispanic or Latino	1,355	3505	5215.7	6858	540.2	1,365	3235	5206.2	6774	625.8
Lumony	Native Hawaiian or Other Pacific Islander	21	4538	5371.9	6090	430.8	21	4055	5406.4	6164	520.0
	Two or More Races	811	4048	5175.9	7092	538.5	835	3712	5151.1	6808	613.7
	White	446	4227	5401.3	6880	531.8	447	4009	5438.5	6741	552.2
	Other/Unknown	14	4508	5390.4	6432	542.6	14	4631	5451.5	6264	524.7
	Gifted	7					7				
Other	IEP	598	3505	5207.0	6702	460.2	612	3235	5257.5	6665	497.9
	Migrant	14	4516	5323.9	6629	680.1	14	4340	5290.8	6530	733.4
	Autism	27	4114	5017.7	6068	464.8	27	3812	5003.7	6076	536.8
	Deaf-blindness	3					3				
	Developmental delay	9					9				
Primary Disability	Emotional disturbance	8					8				
	Hearing Impaired	15	4733	5309.5	5946	358.3	15	4674	5327.5	5915	411.6
	Intellectual Disability	49	4415	4951.3	5845	289.6	51	4175	4948.5	7064 7064 6808 6336 6336 6647 7064 6774 6164 6808 6741 6264 6264 6665 6530 6076	392.8

Table S1.10: Summative Scale Score Summary by Subgroup - Grade 9 (cont.)

Cub manua	<u>Ototuo</u>		Con	nprehensio	on		_		Overall		
Subgroup	Status Multiple disabilities Orthopedic impairment Other health impairment Specific learning disability Speech or language impairment Traumatic brain injury	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Multiple disabilities	20	3505	4375.6	5522	544.0	21	3235	4427.1	5730	633.2
		4					4				
		93	4434	5270.7	6702	448.5	94	4164	5336.5	6665	459.0
		358	4462	5307.0	6579	391.0	368	3989	5379.2	6462	400.1
		9					9				
		4					4				
	Visual impairment	3					3				

* Scale scores cannot be compared across grade bands.

Culture	Ctotus			Listening					Reading		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		3,573	310	537.5	736	76.0	3,531	318	537.8	742	70.7
	Female	1,551	310	540.7	718	74.1	1,532	318	540.1	734	69.6
Gender	Male	2,005	310	534.9	736	77.4	1,982	363	536.0	742	71.6
	Missing	17	396	551.3	645	72.8	17	425	547.6	649	66.2
	American Indian or Alaskan Native	11	369	506.0	639	79.6	10	428	504.4	579	51.1
	Asian	552	333	561.0	718	66.8	549	378	560.4	734	65.7
	Black or African American	822	320	540.3	705	70.5	825	405	536.9	717	66.7
Ethnicity	Hispanic or Latino	1,204	310	522.6	736	80.1	1,189	318	525.1	742	72.1
Lumony	Native Hawaiian or Other Pacific Islander	23	310	529.2	664	86.5	22	363	532.9	669	73.5
	Two or More Races	568	310	534.1	706	76.3	558	390	534.0	713	70.0
	White	387	334	551.1	704	74.8	373	399	554.6	713	72.8
	Other/Unknown	6					5				
	Gifted	5					5				
Other	IEP	501	310	526.1	669	68.7	458	371	525.2	669	57.4
	Migrant	19	364	488.0	582	60.8	19	410	503.2	584	52.8
	Autism	29	333	493.1	642	97.7	19	398	534.0	632	74.8
	Developmental delay	5					5				
Primary Disability	Emotional disturbance	8					8				
	Hearing Impaired	5					6				
	Intellectual Disability	39	375	482.4	612	50.8	34	380	480.8	595	48.6
	Multiple disabilities	23	310	412.9	562	71.7	7				

Table S1.11: Summative Scale Score Summary by Subgroup - Grade 10

Cubanous	Ctatura		l	Listening			Reading						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	1	-		-	_	0	-		_			
	Other health impairment	59	377	519.0	626	59.2	59	371	507.1	621	51.5		
	Specific learning disability	307	381	545.8	669	55.6	297	406	535.7	669	54.9		
	Speech or language impairment	8					8						
	Traumatic brain injury	5					5						
	Visual impairment	5					3						

	Status			Speaking					Writing	Max 729 723 645 635 723 645 635 723 698 729 645 635 723 698 729 642 689 708 657 606 642 606 642	
Subgroup	Status	N	Min	Mean	Max	SD	Ν	Min	Mean	Max	SD
Total		3,475	329	563.0	719	69.4	3,516	326	531.3	729	74
	Female	1,502	329	566.1	719	65.9	1,532	326	535.5	723	73
Gender	Male	1,956	338	560.6	719	71.7	1,967	339	527.8	729	7
	Missing	17	350	563.2	661	98.9	17	381	550.0	645	7
	American Indian or Alaskan Native	11	413	529.2	637	73.1	10	353	508.4	729 723 729 645 635 723 698 729 642 689 708 708	8
	Asian	544	347	584.5	699	57.4	549	354	550.2	723	6
	Black or African American	811	353	565.1	699	61.4	824	347	535.0	698	6
Ethnicity	Hispanic or Latino	1,163	329	548.6	706	77.4	1,177	326	516.7	729	8
Lumony	Native Hawaiian or Other Pacific Islander	22	343	567.0	682	75.5	22	365	541.8	642	7
	Two or More Races	555	342	558.9	719	69.8	559	350	525.2	689	7
	White	364	354	579.6	719	61.8	369	358	550.7	708	7
	Other/Unknown	5					6				
	Gifted	5					5				
Other	IEP	464	342	557.5	674	62.7	451	342	528.0	657	6
	Migrant	18	366	526.1	631	68.0	18	348	492.3	606	7
	Autism	19	379	548.1	638	73.3	18	353	529.8	642	ę
	Developmental delay	7					5				
Primary Disability	Emotional disturbance	9					8				
, <u> </u>	Hearing Impaired	5					6				
	Intellectual Disability	39	349	490.5	611	72.6	33	361	476.8	578	6
	Multiple disabilities	7					7			729 723 729 645 635 723 698 729 642 689 708 708 657 606 642	

Table S1.11: Summative Scale Score Summary by Subgroup - Grade 10 (cont.)

Cubanous	Ctatua			Speaking			Writing						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	1	-		-		0		_				
	Other health impairment	57	342	540.1	639	65.3	56	363	514.1	640	59.6		
	Specific learning disability	298	344	573.9	674	50.1	295	342	540.2	657	54.9		
	Speech or language impairment	8					8						
	Traumatic brain injury	5					5						
	Visual impairment	3					3						

C h	Ctatus		Cor	nprehensio	on	,			Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		3,617	3794	5411.8	7148	550.0	3,674	3696	5439.2	6900	562.9
	Female	1,568	3794	5428.4	7148	538.4	1,591	3696	5466.0	6764	548.0
Gender	Male	2,032	3794	5398.4	7056	559.1	2,066	3900	5417.7	6900	573.0
	Missing	17	4571	5485.7	6453	493.3	17	4210	5534.1	6211	613.9
	American Indian or Alaskan Native	11	4461	5190.8	6156	488.0	11	4254	5240.3	6069	572.8
	Asian	562	3956	5584.3	7148	514.8	569	4037	5611.3	6764	488.2
	Black or African American	833	3868	5413.2	6809	520.6	852	3965	5454.1	6667	513.9
Ethnicity	Hispanic or Latino	1,221	3794	5314.5	7056	558.9	1,231	3696	5328.8	6900	602.1
	Native Hawaiian or Other Pacific Islander	23	3794	5307.7	6435	618.6	23	3900	5398.1	6357	656.2
	Two or More Races	571	3794	5392.3	6941	546.2	586	3900	5407.7	6719	564.1
	White	390	3967	5510.3	7058	562.8	395	4053	5561.0	6712	546.1
	Other/Unknown	6					7				
	Gifted	5					5				
Other	IEP	511	3794	5294.3	6592	481.9	525	3900	5339.6	6396	503.5
	Migrant	19	4398	5092.2	5702	390.1	19	4126	5123.9	5870	469.4
	Autism	30	3956	5085.1	6097	665.6	31	4046	5092.0	6167	681.9
	Developmental delay	5					7				
Primary Disability	Emotional disturbance	8					9				
, 21000011(y	Hearing Impaired	6					6				
	Intellectual Disability	40	4311	5000.8	5963	327.7	42	4062	4938.3	5886	422.9
	Multiple disabilities	23	3794	4556.8	5771	530.4	23	3900	4530.0	5586	466.7

Table S1.11: Summative Scale Score Summary by Subgroup - Grade 10 (cont.)

0	Status Orthopedic impairment Other health impairment Specific learning disability Speech or language impairment Traumatic brain injury		Con	nprehensio	on		Overall						
Subgroup		N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD		
		1	-	-	-	-	2	-	-	-			
		61	4300	5225.7	5975	388.8	62	3992	5273.9	6074	430.1		
	Other health impairment Specific learning disability	312	4475	5429.3	6592	413.9	318	4022	5498.8	6396	400.2		
		8					8						
		5					5						
	Visual impairment	5					5						

* Scale scores cannot be compared across grade bands.

Subaroun	Status			Listening					Reading	Max 755 755 736 684 736 726 727 612 727 612 724 612 755 612 683 686 683 686 591	
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		2,927	289	549.8	741	71.2	2,896	325	547.4	755	68.9
	Female	1,326	310	550.3	741	71.4	1,308	348	548.4	755	67.2
Gender	Male	1,576	289	549.6	734	71.2	1,565	325	546.7	736	70.4
	Missing	25	427	539.0	666	60.8	23	432	541.3	684	66.7
	American Indian or Alaskan Native	3					3				
	Asian	533	352	565.1	734	66.6	533	403	561.0	736	67.6
	Black or African American	763	301	544.5	716	68.5	760	325	540.4	726	65.5
Ethnicity	Hispanic or Latino	900	289	538.7	708	74.5	883	348	537.8	727	69.3
Lumony	Native Hawaiian or Other Pacific Islander	15	433	545.0	632	58.9	15	454	530.3	612	50.2
	Two or More Races	341	390	556.8	741	70.5	342	394	553.3	755	67.6
	White	365	377	559.7	709	70.3	355	375	560.7	724	73.2
	Other/Unknown	7					5				
	Gifted	3					3				
Other	IEP	424	301	525.2	681	68.0	403	325	521.6	683	60.4
	Migrant	33	390	497.5	670	74.0	32	401	506.1	686	72.2
	Autism	13	379	489.1	591	65.2	9				
	Developmental delay	7					7				
Primary Disability	Emotional disturbance	14	453	514.3	578	34.3	14	450	503.5	591	36.6
	Hearing Impaired	3					6				
	Intellectual Disability	41	352	480.7	586	56.7	35	409	484.0	566	41.1
	Multiple disabilities	19	289	406.2	514	57.1	9				

Table S1.12: Summative Scale Score Summary by Subgroup - Grade 11

Cubanous	Ctatura		l	Listening			Reading						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	1			_	_	1	-	_	_			
	Other health impairment	51	384	535.4	647	58.5	50	407	533.4	660	60.4		
	Specific learning disability	266	366	542.8	681	59.5	263	397	531.8	683	57.6		
	Speech or language impairment	3					3						
	Traumatic brain injury	3					3						
	Visual impairment	4					2						

Culture and	Ctotus		Sucgio	Speaking					Writing	Max 712 709 712 641 712 641 702 703 616 709 616 709 616 709 631 677 580 600 497	
Subgroup	Status –	N	Min	Mean	Max	SD	Ν	Min	Mean		SD
Total		2,832	324	574.7	735	64.3	2,880	292	543.1	712	69.
	Female	1,276	336	576.5	735	63.1	1,302	329	544.7	709	69.
Gender	Male	1,535	324	573.4	732	65.3	1,556	292	541.7	712	70.
	Missing	21	379	565.6	652	60.2	22	394	550.8	641	50.
	American Indian or Alaskan Native	3					3			712 709 712 641 712 702 709 616 709 707 681 681 677	
	Asian	528	390	589.1	732	54.7	534	347	555.7	712	62
	Black or African American	750	324	570.3	708	61.4	751	313	539.1	702	67.
Ethnicity	Hispanic or Latino	849	336	562.3	718	73.3	881	292	532.2	709	75.
Lumony	Native Hawaiian or Other Pacific Islander	16	486	579.6	649	44.9	15	430	536.3	616	58
	Two or More Races	335	372	577.8	735	61.1	340	358	549.4	709	70
	White	346	353	590.2	706	56.6	351	362	554.1	707	66.
	Other/Unknown	5					5				
	Gifted	3					3				
Other	IEP	405	324	557.6	706	66.9	398	313	525.1	681	69
	Migrant	32	372	534.0	699	83.5	33	359	490.1	677	86
	Autism	11	437	532.1	616	59.8	8				
	Developmental delay	5					6				
Primary Disability	Emotional disturbance	12	365	537.6	597	63.9	13	385	491.3	580	47
Journal y Diousinty	Hearing Impaired	2					5				
	Intellectual Disability	40	353	501.1	633	65.0	35	347	476.1	600	70
	Multiple disabilities	10	327	434.7	514	67.9	10	292	385.1	712 709 712 641 712 702 709 616 709 707 616 681 681 681 677 580 580	63

Table S1.12: Summative Scale Score Summary by Subgroup - Grade 11 (cont.)

Cubanous	Ctatua			Speaking			Writing						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD		
	Orthopedic impairment	1	-		-		1		_	_			
	Other health impairment	48	440	565.9	622	40.8	50	378	533.8	639	62.3		
	Specific learning disability	266	344	573.9	706	58.1	262	343	539.1	681	62.5		
	Speech or language impairment	3					3						
	Traumatic brain injury	3					3						
	Visual impairment	3					2						

Subarous	Status –		Con	nprehensio	on				Overall	Max 6981 6981 6937 6373 6373 6373 6375 6766 6755 6766 6755 6755 6755 6755 6382 6382 6382 5905 6382 6	
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		2,957	3794	5490.6	7177	530.8	2,997	3568	5529.8	6981	529.4
	Female	1,336	3794	5491.5	7177	523.9	1,353	3884	5540.9	6981	525.8
Gender	Male	1,596	3868	5491.1	7044	537.4	1,619	3568	5521.4	6937	533.7
	Missing	25	4657	5418.5	6559	491.2	25	4574	5475.5	6373	438.0
	American Indian or Alaskan Native	3					3				
	Asian	541	4339	5600.8	7177	523.1	545	4145	5644.4	6937	478.8
	Black or African American	773	3794	5436.8	6805	502.1	792	3674	5483.6	6766	511.7
Ethnicity	Hispanic or Latino	905	3794	5418.7	6830	536.2	912	3568	5446.3	6755	566.4
Lunioty	Native Hawaiian or Other Pacific Islander	15	4714	5392.7	5957	398.3	16	4732	5508.7	5994	402.2
	Two or More Races	346	4376	5541.8	7092	524.4	353	4137	5581.9	6981	516.2
	White	367	4281	5574.6	7044	558.5	369	4215	5618.0	6711	516.1
	Other/Unknown	7					7				
	Gifted	3					3				
Other	IEP	433	3794	5281.1	6660	474.7	446	3674	5335.5	6531	523.2
	Migrant	33	4399	5158.1	6465	515.3	33	4137	5154.6	6382	598.8
	Autism	13	4271	5043.8	5740	444.7	14	4472	5095.2	5905	483.7
	Developmental delay	9					9				
Primary Disability	Emotional disturbance	14	4767	5230.5	5789	277.2	14	4479	5180.1	5739	308.9
, <u> </u>	Hearing Impaired	6					6				
	Intellectual Disability	41	4339	4990.8	5696	338.0	45	4145	4968.4	5806	412.3
	Multiple disabilities	20	3794	4515.1	5287	364.6	22	3568	4474.8	5191	420.9

Table S1.12: Summative Scale Score Summary by Subgroup - Grade 11 (cont.)

	01-1		Con	nprehensio	on				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Orthopedic impairment	1	-	-	-	-	1	-	-	-	
	Other health impairment	52	4322	5384.4	6297	458.3	52	4378	5424.1	6172	436.1
		268	4376	5397.5	6660	424.5	274	4047	5493.4	6531	452.6
	Speech or language impairment	3					3				
	Traumatic brain injury	3					3				
	Visual impairment	4					4				

* Scale scores cannot be compared across grade bands.

Cubanana	Ctotus			Listening					Reading		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		2,203	253	554.4	809	71.4	2,171	258	551.9	817	70.1
	Female	1,040	310	555.6	809	70.6	1,017	381	551.6	817	68.5
Gender	Male	1,150	253	552.9	712	71.9	1,141	258	551.7	729	71.4
	Missing	13	431	592.1	692	85.6	13	453	598.0	714	73.4
	American Indian or Alaskan Native	5					4				
	Asian	466	310	574.8	809	67.4	453	408	575.1	817	67.9
	Black or African American	510	253	548.1	720	68.4	510	258	542.6	732	67.8
Ethnicity	Hispanic or Latino	724	281	542.9	710	75.5	711	285	542.4	729	70.7
Lumoty	Native Hawaiian or Other Pacific Islander	9					9				
	Two or More Races	212	401	555.7	706	66.3	214	402	551.6	729	65.4
	White	274	381	560.5	733	69.4	267	407	555.5	749	72.2
	Other/Unknown	3					3				
	Gifted	1					1				
Other	IEP	301	281	525.3	683	67.0	282	285	519.9	690	60.8
	Migrant	20	406	507.1	710	81.5	20	424	511.5	729	74.9
	Autism	11	389	509.4	620	82.7	10	425	518.5	611	62.7
	Developmental delay	2					2				
Primary Disability	Emotional disturbance	9					9				
	Hearing Impaired	1					2				
	Intellectual Disability	40	310	472.2	570	52.9	34	417	475.2	556	35.9
	Multiple disabilities	15	310	427.3	497	42.1	8				

Table S1.13: Summative Scale Score Summary by Subgroup - Grade 12

Cubarour	Ctotus.		l	Listening			_		Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Other health impairment	28	409	528.5	625	54.7	27	403	511.7	611	53.8
	Specific learning disability	193	384	544.3	683	56.9	187	407	533.0	690	57.3
	Traumatic brain injury	2					2				

* Scale scores cannot be compared across grade bands. * Domains with Exemption or Not Attempted are excluded.

Subaroun	Status		Suegie	Speaking					Writing		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		2,147	297	580.6	770	61.3	2,163	263	546.8	808	67.3
	Female	1,012	346	582.5	770	59.9	1,016	344	548.7	808	67.0
Gender	Male	1,123	297	578.5	715	62.3	1,137	263	544.8	704	67.3
	Missing	12	463	613.7	710	73.4	10	383	584.8	685	89.7
	American Indian or Alaskan Native	4					5				
	Asian	447	400	596.9	770	52.4	452	354	564.8	808	59.1
	Black or African American	507	297	576.3	697	58.5	509	263	541.5	698	64.8
Ethnicity	Hispanic or Latino	710	316	568.3	715	67.0	710	295	536.4	699	73.1
Lumoty	Native Hawaiian or Other Pacific Islander	9					9				
	Two or More Races	202	360	582.6	705	58.2	209	373	549.8	691	63.5
	White	265	355	592.7	720	59.4	267	354	551.6	721	66.3
	Other/Unknown	3					2				
	Gifted	1					1				
Other	IEP	278	351	564.3	674	58.3	280	353	524.4	656	68.4
	Migrant	18	364	536.0	688	67.7	20	390	501.6	665	65.2
	Autism	9					9				
	Developmental delay	1					2				
Primary Disability	Emotional disturbance	8					8				
	Hearing Impaired	1					2				
	Intellectual Disability	34	385	507.6	628	55.6	33	364	465.2	589	60.6
	Multiple disabilities	5					7				

Table S1.13: Summative Scale Score Summary by Subgroup - Grade 12 (cont.)

Cubarour	Statua		ę	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Other health impairment	28	438	557.1	644	49.8	25	368	516.4	626	63.0
	Specific learning disability	190	360	579.4	674	47.9	191	354	539.2	656	59.0
	Traumatic brain injury	3					2				

* Scale scores cannot be compared across grade bands. * Domains with Exemption or Not Attempted are excluded.

Cub arround	Ctotus		Cor	nprehensio	on	,			Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		2,223	3505	5528.6	7177	544.6	2,247	3235	5570.0	7483	521.2
	Female	1,045	3794	5524.3	7177	531.1	1,057	3900	5578.0	7483	516.4
Gender	Male	1,164	3505	5529.0	7075	554.6	1,176	3235	5559.5	6754	524.1
	Missing	14	4640	5821.4	7058	663.9	14	4555	5841.9	6561	593.0
	American Indian or Alaskan Native	5					5				
	Asian	468	3794	5692.2	7177	543.8	473	3900	5716.1	7483	487.4
	Black or African American	516	3505	5468.2	7032	522.8	526	3235	5528.6	6766	497.1
Ethnicity	Hispanic or Latino	731	3505	5452.6	7075	553.2	735	3517	5479.4	6697	551.7
Linnony	Native Hawaiian or Other Pacific Islander	9					9				
	Two or More Races	215	4412	5531.0	6853	506.6	216	4347	5579.6	6754	486.6
	White	276	4367	5559.7	6960	538.6	280	4190	5628.4	6912	512.7
	Other/Unknown	3					3				
	Gifted	1					1				
Other	IEP	305	3505	5282.4	6750	476.7	309	3517	5342.1	6415	507.7
	Migrant	20	4590	5223.1	7075	641.5	20	4486	5231.3	6697	556.9
	Autism	11	4580	5197.8	5837	491.7	11	4120	5245.1	5976	627.4
	Developmental delay	2					2				
Primary Disability	Emotional disturbance	9					9				
	Hearing Impaired	2					2				
	Intellectual Disability	40	3794	4932.0	5621	337.9	41	3900	4920.3	5698	386.6
	Multiple disabilities	16	3794	4622.8	5036	275.2	16	3900	4555.5	5030	287.4

Table S1.13: Summative Scale Score Summary by Subgroup - Grade 12 (cont.)

Cubarour	Ctotus.		Cor	nprehensio	on		_		Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Other health impairment	29	4520	5287.5	5989	383.8	29	4320	5340.6	6023	418.6
	Specific learning disability	194	4397	5409.5	6750	431.6	197	4190	5495.8	6415	419.1
	disability Traumatic brain injury	2					3				

* Scale scores cannot be compared across grade bands.

Section 2: Summative Assessment - Percentage of Students by Domain Performance Level

* Domains with Exemption or Not Attempted are excluded from counts, which only include tests assigned to domain performance levels 1-5.

Subaroun	Status	ĩ		Listen	ing			_		Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		10,052	11.8	13.1	48.3	11.5	15.2	9,925	13.3	14.0	36.7	14.8	21.2
	Female	4,792	10.3	10.7	48.9	12.3	17.8	4,749	11.3	12.5	36.0	15.2	25.0
Gender	Male	5,070	13.2	15.5	47.9	10.7	12.7	4,991	15.1	15.5	37.5	14.1	17.7
	Missing	190	13.7	10.5	45.3	12.1	18.4	185	14.1	12.4	29.2	22.2	22.2
	American Indian or Alaskan Native	18	11.1	11.1	44.4	27.8	5.6	18	5.6	22.2	33.3	22.2	16.7
	Asian	2,510	7.3	10.2	48.0	13.7	20.7	2,498	8.5	10.4	36.1	16.4	28.6
	Black or African American	1,887	11.2	13.2	51.0	11.0	13.6	1,868	13.7	15.1	38.5	14.3	18.3
Ethnicity	Hispanic or Latino	2,686	14.6	16.9	49.1	9.5	9.9	2,642	15.9	18.1	37.7	13.8	14.5
Lunnony	Native Hawaiian or Other Pacific Islander	48	12.5	14.6	50.0	10.4	12.5	48	10.4	10.4	41.7	18.8	18.8
	Two or More Races	1,261	20.0	15.5	43.9	8.2	12.4	1,233	21.1	16.3	34.5	11.1	17.0
	White	1,612	8.6	9.4	48.0	14.4	19.6	1,588	10.1	9.8	35.4	17.3	27.5
	Other/Unknown	30	13.3	3.3	40.0	6.7	36.7	30	13.3	10.0	23.3	10.0	43.3
	Gifted	2	0.0	0.0	0.0	0.0	100.0	2	0.0	0.0	0.0	0.0	100.0
Other	IEP	508	25.6	19.7	44.9	5.1	4.7	462	20.3	21.2	39.8	10.2	8.4
	Migrant	16	6.3	25.0	43.8	6.3	18.8	18	11.1	22.2	38.9	5.6	22.2
	Autism	123	40.7	22.8	31.7	4.9	0.0	93	23.7	24.7	39.8	8.6	3.2
	Developmental delay	9	55.6	11.1	33.3	0.0	0.0	7	42.9	28.6	28.6	0.0	0.0
Primary Disability	Emotional disturbance	6	0.0	0.0	50.0	33.3	16.7	6	0.0	0.0	16.7	50.0	33.3
Journally Distantly	Hearing Impaired	3	66.7	33.3	0.0	0.0	0.0	4	0.0	75.0	25.0	0.0	0.0
	Intellectual Disability	25	56.0	36.0	8.0	0.0	0.0	20	55.0	25.0	20.0	0.0	0.0
	Multiple disabilities	20	80.0	15.0	5.0	0.0	0.0	10	80.0	10.0	10.0	0.0	0.0

Table S2.1: Summative Performance Level by Domain - Kindergarten

Cubarroun	C4-44-1-			Listen	ing			_		Read	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	10	10.0	30.0	50.0	0.0	10.0	10	10.0	30.0	40.0	10.0	10.0
	Other health impairment	41	24.4	12.2	48.8	7.3	7.3	40	25.0	12.5	35.0	12.5	15.0
	Specific learning disability	35	14.3	25.7	54.3	5.7	0.0	34	23.5	17.6	50.0	5.9	2.9
	Speech or language impairment	223	9.9	17.5	58.3	5.8	8.5	225	11.6	20.9	43.6	12.4	11.6
	Traumatic brain injury	1	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0
	Visual impairment	5	20.0	0.0	80.0	0.0	0.0	4	0.0	25.0	75.0	0.0	0.0

Cub ana un	Ctatua	,		Speak		. (com	,			Writi	ng		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		9,758	11.8	9.7	26.2	16.0	36.3	9,899	34.2	25.8	27.9	4.9	7
	Female	4,678	10.2	9.0	24.0	16.2	40.5	4,739	32.2	26.7	28.9	4.5	7
Gender	Male	4,897	13.3	10.3	28.4	15.9	32.1	4,977	36.2	25.1	27.0	5.1	6
	Missing	183	13.1	12.0	21.3	14.8	38.8	183	29.0	24.0	26.8	11.5	8
	American Indian or Alaskan Native	17	0.0	11.8	29.4	23.5	35.3	19	31.6	26.3	31.6	5.3	Ę
	Asian	2,460	8.1	8.5	23.6	16.5	43.3	2,483	19.9	23.6	36.4	8.3	1
	Black or African American	1,834	7.8	8.1	28.0	18.6	37.5	1,858	34.3	26.7	28.4	4.5	(
Ethnicity	Hispanic or Latino	2,596	15.5	12.2	28.2	14.3	29.8	2,623	46.5	28.3	19.9	2.0	;
Lumony	Native Hawaiian or Other Pacific Islander	47	4.3	19.1	25.5	23.4	27.7	48	29.2	25.0	29.2	10.4	
	Two or More Races	1,221	21.9	11.0	26.4	13.3	27.4	1,250	48.0	24.8	19.1	3.4	
	White	1,560	8.8	8.1	24.9	16.9	41.3	1,588	25.5	25.1	34.2	5.7	(
	Other/Unknown	23	4.3	0.0	13.0	17.4	65.2	30	23.3	20.0	33.3	6.7	10
	Gifted	2	0.0	0.0	0.0	0.0	100.0	2	0.0	0.0	0.0	0.0	10
Other	IEP	452	27.9	18.4	30.1	11.9	11.7	454	48.5	21.8	22.9	4.0	:
	Migrant	17	23.5	17.6	17.6	17.6	23.5	17	35.3	29.4	23.5	5.9	ţ
	Autism	91	40.7	14.3	30.8	12.1	2.2	89	37.1	20.2	30.3	11.2	
	Developmental delay	7	14.3	42.9	14.3	14.3	14.3	8	37.5	37.5	25.0	0.0	(
Primary Disability	Emotional disturbance	7	14.3	0.0	28.6	0.0	57.1	6	16.7	0.0	50.0	16.7	1
inter y broughty	Hearing Impaired	3	100.0	0.0	0.0	0.0	0.0	3	66.7	33.3	0.0	0.0	
	Intellectual Disability	20	70.0	10.0	20.0	0.0	0.0	20	80.0	10.0	10.0	0.0	
	Multiple disabilities	14	78.6	7.1	14.3	0.0	0.0	11	100.0	0.0	0.0	0.0	

Table S2.1: Summative Performance Level by Domain - Kindergarten (cont.)

Cubana	C4-44-1-			Speak	ing			_		Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	10	30.0	10.0	30.0	20.0	10.0	10	40.0	30.0	30.0	0.0	0.0
	Other health impairment	35	22.9	11.4	34.3	14.3	17.1	39	64.1	5.1	20.5	0.0	10.3
		33	21.2	27.3	27.3	18.2	6.1	34	47.1	35.3	14.7	2.9	0.0
	Speech or language impairment	219	15.5	21.9	32.9	12.8	16.9	222	45.5	25.2	23.4	2.7	3.2
	Traumatic brain injury	1	0.0	100.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0
	Visual impairment	5	20.0	20.0	40.0	20.0	0.0	4	25.0	50.0	25.0	0.0	0.0

Cubaroun	Statua			Listen	ing					Read	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
Total		8,723	5.8	6.2	28.1	25.4	34.5	8,628	18.4	16.8	30.1	14.1	20.5
	Female	4,128	5.2	5.5	26.3	25.7	37.3	4,104	16.8	16.4	29.3	14.9	22.6
Gender	Male	4,475	6.3	6.9	29.7	25.1	32.0	4,406	20.0	17.2	30.7	13.5	18.6
	Missing	120	6.7	7.5	25.8	24.2	35.8	118	17.8	16.1	35.6	9.3	21.2
	American Indian or Alaskan Native	28	0.0	14.3	35.7	21.4	28.6	28	28.6	14.3	21.4	14.3	21.4
	Asian	2,019	3.4	5.0	24.0	23.5	44.2	2,001	9.5	12.6	27.6	17.7	32.6
	Black or African American	1,597	5.8	7.0	30.6	25.2	31.5	1,572	16.9	15.6	32.6	15.7	19.2
Ethnicity	Hispanic or Latino	2,520	5.9	7.9	31.6	28.1	26.5	2,493	25.4	21.9	31.1	10.0	11.6
Lunioty	Native Hawaiian or Other Pacific Islander	55	9.1	7.3	18.2	20.0	45.5	55	12.7	16.4	25.5	18.2	27.3
	Two or More Races	1,078	10.9	6.3	31.5	24.1	27.1	1,074	28.9	18.8	27.9	11.7	12.7
	White	1,397	5.1	3.9	22.2	24.9	43.9	1,378	12.6	13.8	30.9	16.3	26.5
	Other/Unknown	29	3.4	3.4	34.5	20.7	37.9	27	11.1	11.1	40.7	14.8	22.2
	Gifted	23	0.0	0.0	13.0	17.4	69.6	23	4.3	4.3	21.7	17.4	52.2
Other	IEP	600	17.7	11.5	39.3	19.3	12.2	530	37.0	21.3	24.0	11.5	6.2
	Migrant	22	13.6	18.2	4.5	31.8	31.8	22	27.3	27.3	22.7	4.5	18.2
	Autism	116	37.9	18.1	29.3	6.9	7.8	84	36.9	20.2	17.9	16.7	8.3
	Developmental delay	2	50.0	0.0	50.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0
Primary Disability	Emotional disturbance	14	14.3	14.3	35.7	21.4	14.3	13	38.5	23.1	30.8	7.7	0.0
	Hearing Impaired	8	37.5	12.5	37.5	12.5	0.0	8	50.0	12.5	25.0	12.5	0.0
	Intellectual Disability	33	33.3	15.2	42.4	3.0	6.1	26	76.9	11.5	11.5	0.0	0.0
	Multiple disabilities	26	73.1	7.7	11.5	7.7	0.0	10	60.0	10.0	10.0	10.0	10.0

Table S2.2: Summative Performance Level by Domain - Grade 1

Cubarroun	Ctat <i>u</i> a			Listen	ing					Readi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	13	15.4	7.7	38.5	23.1	15.4	11	36.4	9.1	27.3	18.2	9.1
	Other health impairment	68	14.7	10.3	39.7	16.2	19.1	60	38.3	20.0	26.7	10.0	5.0
	Specific learning disability	85	7.1	12.9	48.2	25.9	5.9	84	53.6	19.0	21.4	2.4	3.6
	Speech or language impairment	227	3.1	7.5	44.1	28.2	17.2	227	25.1	25.6	27.3	15.0	7.0
	Traumatic brain injury	1	0.0	0.0	100.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0
	Visual impairment	2	0.0	0.0	50.0	50.0	0.0	2	50.0	0.0	50.0	0.0	0.0

Cubana	Ctatua	·		Speak	ing	ĺ				Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
Total		8,534	16.4	22.2	10.2	18.3	32.9	8,584	23.4	20.5	32.3	9.6	14.2
	Female	4,070	14.6	20.5	10.1	18.5	36.3	4,085	21.4	19.8	32.3	10.6	15.9
Gender	Male	4,348	18.0	23.7	10.3	18.1	29.9	4,383	25.4	21.2	32.3	8.6	12.5
	Missing	116	19.0	25.9	10.3	19.0	25.9	116	19.8	22.4	35.3	8.6	13.8
	American Indian or Alaskan Native	27	3.7	22.2	14.8	18.5	40.7	28	32.1	7.1	35.7	7.1	17.9
	Asian	1,977	12.4	16.7	8.5	18.0	44.4	1,987	12.9	16.6	34.3	12.6	23.5
	Black or African American	1,565	14.6	24.5	11.7	17.7	31.5	1,575	21.1	21.1	34.7	10.9	12.2
Ethnicity	Hispanic or Latino	2,448	19.9	26.1	11.1	19.6	23.4	2,469	32.6	24.2	29.7	6.0	7.5
Lumony	Native Hawaiian or Other Pacific Islander	55	14.5	20.0	12.7	21.8	30.9	55	21.8	16.4	25.5	20.0	16.4
	Two or More Races	1,067	23.5	24.5	9.9	16.9	25.2	1,070	34.9	22.1	27.6	6.8	8.6
	White	1,370	12.7	19.2	9.2	18.2	40.7	1,372	15.7	18.3	35.2	11.7	19.0
	Other/Unknown	25	16.0	12.0	8.0	24.0	40.0	28	17.9	14.3	39.3	7.1	21.4
	Gifted	23	0.0	13.0	4.3	13.0	69.6	22	4.5	9.1	22.7	18.2	45.5
Other	IEP	530	39.1	27.0	8.9	12.1	13.0	529	47.4	18.3	24.2	6.8	3.2
	Migrant	22	22.7	13.6	18.2	18.2	27.3	22	36.4	18.2	27.3	9.1	9.1
	Autism	83	60.2	18.1	7.2	3.6	10.8	82	45.1	14.6	26.8	9.8	3.7
	Developmental delay	2	50.0	50.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	14	57.1	21.4	0.0	7.1	14.3	13	53.8	7.7	30.8	7.7	0.0
	Hearing Impaired	8	62.5	12.5	12.5	12.5	0.0	8	50.0	50.0	0.0	0.0	0.0
	Intellectual Disability	27	70.4	7.4	14.8	7.4	0.0	27	81.5	3.7	11.1	3.7	0.0
	Multiple disabilities	9	66.7	22.2	11.1	0.0	0.0	9	66.7	11.1	22.2	0.0	0.0

Table S2.2: Summative Performance Level by Domain - Grade 1 (cont.)

Cubarroun	C 4-4-1-2			Speak	ing			_		Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	11	18.2	27.3	9.1	18.2	27.3	11	45.5	18.2	9.1	18.2	9.1
	Other health impairment	62	32.3	35.5	4.8	17.7	9.7	61	54.1	13.1	23.0	8.2	1.6
	Specific learning disability	83	41.0	26.5	10.8	13.3	8.4	84	61.9	17.9	16.7	2.4	1.2
	Speech or language impairment	224	26.3	32.1	9.4	13.8	18.3	227	36.1	22.5	29.5	7.5	4.4
	Traumatic brain injury	1	0.0	0.0	100.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0
	Visual impairment	2	100.0	0.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0

Cubana	Ctotus	·		Listen	ing					Read	ing		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		7,247	6.2	4.3	25.8	34.5	29.3	7,128	17.6	14.6	31.7	20.0	16.1
	Female	3,307	5.4	3.5	24.8	34.5	31.8	3,266	15.5	12.8	31.0	22.6	18.1
Gender	Male	3,845	6.8	4.9	26.7	34.4	27.2	3,770	19.5	16.1	32.3	17.8	14.3
	Missing	95	5.3	4.2	24.2	41.1	25.3	92	12.0	16.3	32.6	21.7	17.4
	American Indian or Alaskan Native	17	11.8	5.9	11.8	35.3	35.3	17	23.5	0.0	47.1	11.8	17.6
	Asian	1,467	3.6	3.7	24.1	32.9	35.8	1,451	10.5	12.1	30.3	24.7	22.3
	Black or African American	1,406	4.5	4.0	27.0	35.7	28.9	1,385	15.5	12.4	35.2	22.3	14.6
Ethnicity	Hispanic or Latino	2,241	7.2	5.0	27.9	34.6	25.2	2,209	21.9	17.4	31.9	17.2	11.6
Lumeny	Native Hawaiian or Other Pacific Islander	45	4.4	2.2	31.1	40.0	22.2	45	13.3	17.8	31.1	20.0	17.8
	Two or More Races	950	12.4	4.5	25.7	34.7	22.6	921	28.6	15.9	28.1	15.2	12.3
	White	1,099	3.9	3.5	22.5	34.7	35.5	1,078	11.5	14.1	31.6	21.0	21.8
	Other/Unknown	22	13.6	9.1	13.6	31.8	31.8	22	22.7	9.1	31.8	18.2	18.2
	Gifted	36	0.0	0.0	13.9	30.6	55.6	36	0.0	11.1	19.4	25.0	44.4
Other	Home Schooled	1	0.0	100.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0
Other	IEP	601	14.3	12.0	37.6	26.3	9.8	524	39.7	22.5	26.7	7.3	3.8
	Migrant	20	10.0	10.0	20.0	35.0	25.0	20	30.0	10.0	25.0	20.0	15.0
	Autism	95	27.4	18.9	37.9	8.4	7.4	71	36.6	22.5	26.8	8.5	5.6
	Developmental delay	4	75.0	0.0	25.0	0.0	0.0	2	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	9	0.0	11.1	66.7	22.2	0.0	9	77.8	0.0	22.2	0.0	0.0
	Hearing Impaired	6	0.0	16.7	50.0	33.3	0.0	9	55.6	11.1	33.3	0.0	0.0
	Intellectual Disability	38	31.6	21.1	39.5	7.9	0.0	30	63.3	23.3	13.3	0.0	0.0

Table S2.3: Summative Performance Level by Domain - Grade 2

Subaroun	Statua			Listen	ing					Read	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Multiple disabilities	35	71.4	17.1	8.6	0.0	2.9	9	88.9	11.1	0.0	0.0	0.0
	Orthopedic impairment	5	0.0	20.0	40.0	40.0	0.0	1	0.0	0.0	100.0	0.0	0.0
	Other health impairment	77	6.5	11.7	40.3	28.6	13.0	71	36.6	28.2	26.8	5.6	2.8
	Specific learning disability	186	3.8	11.8	44.6	31.2	8.6	177	49.7	22.6	22.6	3.4	1.7
	Speech or language impairment	142	4.9	5.6	30.3	41.5	17.6	141	18.4	22.0	36.2	15.6	7.8
	Traumatic brain injury	2	0.0	0.0	50.0	0.0	50.0	2	50.0	0.0	0.0	50.0	0.0
	Visual impairment	2	0.0	0.0	50.0	50.0	0.0	2	0.0	50.0	50.0	0.0	0.0

	Statua	ý		Speak	ing	,		_		Writi	ng		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		7,001	14.7	15.9	15.8	22.6	31.0	7,081	16.1	14.7	33.0	19.9	16.3
	Female	3,220	12.6	14.9	15.1	23.0	34.3	3,248	13.6	13.2	32.4	21.7	19.1
Gender	Male	3,692	16.5	16.8	16.6	22.1	28.0	3,740	18.3	16.1	33.6	18.3	13.8
	Missing	89	12.4	13.5	12.4	29.2	32.6	93	14.0	12.9	33.3	19.4	20.4
	American Indian or Alaskan Native	17	23.5	5.9	17.6	23.5	29.4	17	23.5	0.0	47.1	23.5	5.9
	Asian	1,427	12.9	13.6	13.8	22.7	37.0	1,443	9.9	12.3	31.8	24.2	21.8
	Black or African American	1,355	10.6	17.6	17.3	22.8	31.7	1,378	14.9	12.8	36.0	20.2	16.1
Ethnicity	Hispanic or Latino	2,173	18.0	17.8	16.8	22.4	24.9	2,185	19.6	18.0	33.5	16.9	11.9
Linnolty	Native Hawaiian or Other Pacific Islander	40	20.0	10.0	12.5	27.5	30.0	45	11.1	13.3	28.9	26.7	20.0
	Two or More Races	913	21.0	17.9	16.4	20.2	24.5	922	25.4	16.2	29.8	16.8	11.8
	White	1,057	9.8	11.4	14.3	24.4	40.1	1,069	10.9	12.7	32.5	21.9	22.1
	Other/Unknown	19	5.3	26.3	10.5	36.8	21.1	22	18.2	18.2	27.3	22.7	13.6
	Gifted	37	2.7	8.1	8.1	24.3	56.8	36	0.0	0.0	27.8	30.6	41.7
Other	Home Schooled	1	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0
Other	IEP	524	32.4	26.0	15.5	14.7	11.5	524	38.4	24.2	27.3	6.3	3.8
	Migrant	20	25.0	5.0	20.0	20.0	30.0	20	20.0	25.0	20.0	20.0	15.0
	Autism	67	58.2	13.4	7.5	10.4	10.4	71	38.0	19.7	33.8	4.2	4.2
	Developmental delay	2	50.0	50.0	0.0	0.0	0.0	2	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	9	44.4	44.4	11.1	0.0	0.0	9	77.8	11.1	11.1	0.0	0.0
	Hearing Impaired	5	40.0	0.0	0.0	40.0	20.0	8	62.5	0.0	25.0	12.5	0.0
	Intellectual Disability	30	56.7	36.7	3.3	0.0	3.3	30	70.0	13.3	16.7	0.0	0.0

Table S2.3: Summative Performance Level by Domain - Grade 2 (cont.)

Quitanna	C 4-4			Speak	ing			_		Writi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Multiple disabilities	12	83.3	16.7	0.0	0.0	0.0	11	90.9	9.1	0.0	0.0	0.0
	Orthopedic impairment	2	50.0	0.0	50.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0
	Other health impairment	75	20.0	33.3	24.0	10.7	12.0	72	37.5	23.6	27.8	9.7	1.4
	Specific learning disability	178	27.5	32.0	12.9	19.1	8.4	177	43.5	26.6	23.7	5.6	0.6
	Speech or language impairment	141	23.4	17.7	22.0	17.7	19.1	139	18.0	27.3	35.3	8.6	10.8
	Traumatic brain injury	1	0.0	0.0	0.0	0.0	100.0	2	50.0	0.0	0.0	50.0	0.0
	Visual impairment	2	0.0	0.0	0.0	100.0	0.0	2	0.0	50.0	50.0	0.0	0.0

Cubana	Ctatua			Listen	ing					Read	ing		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		5,814	6.5	3.9	24.5	41.0	24.1	5,726	21.4	15.1	39.4	15.5	8.6
	Female	2,590	6.0	4.0	24.1	40.0	26.0	2,554	18.7	13.5	40.6	16.6	10.6
Gender	Male	3,198	6.8	3.9	25.0	41.7	22.6	3,146	23.6	16.3	38.5	14.7	6.9
	Missing	26	19.2	0.0	19.2	46.2	15.4	26	23.1	23.1	34.6	15.4	3.8
	American Indian or Alaskan Native	11	27.3	0.0	27.3	36.4	9.1	11	36.4	0.0	45.5	0.0	18.2
	Asian	991	4.1	4.0	21.9	39.6	30.4	977	14.7	12.7	38.8	20.3	13.5
	Black or African American	1,202	5.3	2.9	26.7	43.6	21.5	1,185	19.8	17.0	42.9	13.1	7.3
Ethnicity	Hispanic or Latino	1,879	8.0	4.4	25.4	40.4	21.8	1,850	25.6	15.7	38.1	13.6	7.0
Lumony	Native Hawaiian or Other Pacific Islander	50	0.0	2.0	30.0	48.0	20.0	50	12.0	18.0	40.0	20.0	10.0
	Two or More Races	882	10.1	4.3	23.8	40.4	21.4	865	27.6	15.0	38.5	12.9	5.9
	White	791	4.0	3.8	23.1	40.1	29.0	780	15.6	14.1	39.0	20.4	10.9
	Other/Unknown	8	0.0	12.5	0.0	62.5	25.0	8	25.0	12.5	37.5	25.0	0.0
	Gifted	30	0.0	0.0	16.7	33.3	50.0	29	3.4	6.9	37.9	31.0	20.7
Other	IEP	791	10.0	7.0	42.1	32.0	9.0	706	45.6	21.4	25.2	6.5	1.3
	Migrant	28	10.7	7.1	14.3	32.1	35.7	29	34.5	3.4	41.4	10.3	10.3
	Autism	88	33.0	11.4	31.8	18.2	5.7	63	44.4	20.6	30.2	3.2	1.6
	Developmental delay	6	0.0	50.0	50.0	0.0	0.0	3	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	17	5.9	0.0	52.9	29.4	11.8	16	50.0	18.8	12.5	18.8	0.0
	Hearing Impaired	8	12.5	0.0	50.0	0.0	37.5	8	25.0	37.5	25.0	0.0	12.5
	Intellectual Disability	41	14.6	19.5	53.7	12.2	0.0	33	75.8	9.1	15.2	0.0	0.0
	Multiple disabilities	32	75.0	12.5	12.5	0.0	0.0	12	100.0	0.0	0.0	0.0	0.0

Table S2.4: Summative Performance Level by Domain - Grade 3

0	04-4			Listen	ing					Readi	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	5	0.0	0.0	0.0	60.0	40.0	6	16.7	0.0	16.7	50.0	16.7
	Other health impairment	111	3.6	8.1	47.7	29.7	10.8	101	49.5	24.8	18.8	4.0	3.0
	Specific learning disability	395	4.1	5.3	47.8	36.5	6.3	375	49.9	21.3	24.0	4.3	0.5
	Speech or language impairment	94	1.1	0.0	22.3	51.1	25.5	94	7.4	26.6	41.5	21.3	3.2
	Traumatic brain injury	2	0.0	50.0	0.0	0.0	50.0	0					
	Visual impairment	1	0.0	0.0	100.0	0.0	0.0	0					

Cubana	Ctatua	·		Speak	ing	Í				Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
Total		5,643	12.7	9.8	15.9	28.8	32.8	5,701	20.0	15.5	37.4	17.7	9.4
	Female	2,519	11.2	9.2	14.2	29.1	36.4	2,547	17.9	14.7	36.7	18.9	11.8
Gender	Male	3,098	13.9	10.2	17.2	28.7	30.0	3,128	21.8	16.0	37.9	16.8	7.5
	Missing	26	19.2	15.4	26.9	15.4	23.1	26	23.1	15.4	46.2	7.7	7.7
	American Indian or Alaskan Native	10	30.0	0.0	0.0	60.0	10.0	11	27.3	18.2	27.3	18.2	9.1
	Asian	965	9.5	9.1	13.6	26.9	40.8	971	13.7	14.5	36.5	21.5	13.8
	Black or African American	1,177	10.3	10.5	19.6	29.3	30.3	1,176	18.2	17.6	40.2	16.2	7.7
Ethnicity	Hispanic or Latino	1,840	15.3	10.2	15.8	29.8	28.9	1,848	23.9	15.9	37.3	15.0	7.8
Linnony	Native Hawaiian or Other Pacific Islander	50	4.0	8.0	22.0	40.0	26.0	50	6.0	16.0	42.0	26.0	10.0
	Two or More Races	845	17.8	9.8	16.9	27.9	27.6	861	26.7	15.1	35.7	15.7	6.9
	White	749	9.1	8.7	12.0	27.4	42.9	777	15.2	12.6	36.2	22.9	13.1
	Other/Unknown	7	0.0	14.3	0.0	71.4	14.3	7	0.0	14.3	42.9	42.9	0.0
	Gifted	30	0.0	6.7	6.7	26.7	60.0	29	3.4	3.4	41.4	17.2	34.5
Other	IEP	709	22.4	20.0	20.3	24.1	13.1	703	43.8	24.2	23.9	5.7	2.4
	Migrant	29	24.1	10.3	3.4	24.1	37.9	28	32.1	3.6	39.3	10.7	14.3
	Autism	58	37.9	24.1	17.2	13.8	6.9	58	37.9	19.0	34.5	8.6	0.0
	Developmental delay	3	66.7	33.3	0.0	0.0	0.0	3	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	18	22.2	16.7	11.1	44.4	5.6	16	50.0	25.0	12.5	6.3	6.3
	Hearing Impaired	7	42.9	0.0	14.3	28.6	14.3	8	12.5	37.5	37.5	12.5	0.0
	Intellectual Disability	33	33.3	42.4	12.1	12.1	0.0	30	83.3	6.7	10.0	0.0	0.0
	Multiple disabilities	13	76.9	15.4	7.7	0.0	0.0	13	100.0	0.0	0.0	0.0	0.0

Table S2.4: Summative Performance Level by Domain - Grade 3 (cont.)

Cubana	<u>Ctatus</u>			Speak	ing			_		Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	5	0.0	20.0	0.0	20.0	60.0	5	0.0	20.0	0.0	60.0	20.0
	Other health impairment	105	21.9	27.6	18.1	18.1	14.3	102	45.1	24.5	20.6	5.9	3.9
	Specific learning disability	381	21.0	17.6	23.6	24.7	13.1	381	47.8	27.0	20.5	2.6	2.1
	Speech or language impairment	91	6.6	11.0	17.6	38.5	26.4	93	12.9	20.4	47.3	17.2	2.2
	Traumatic brain injury	1	100.0	0.0	0.0	0.0	0.0	0					
	Visual impairment	0						0					

Subarous	Statua	·		Listen	ing			_		Read	ing		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		4,383	7.6	5.7	14.9	35.3	36.4	4,288	18.0	12.6	31.0	22.0	16.5
	Female	1,929	6.8	5.3	14.7	35.5	37.7	1,897	15.6	12.3	30.8	23.7	17.7
Gender	Male	2,400	8.0	6.1	15.2	35.2	35.5	2,338	19.6	13.0	30.9	20.9	15.6
	Missing	54	16.7	5.6	13.0	35.2	29.6	53	30.2	9.4	37.7	9.4	13.2
	American Indian or Alaskan Native	9	11.1	0.0	33.3	22.2	33.3	9	33.3	11.1	0.0	33.3	22.2
	Asian	655	5.3	4.1	11.6	32.7	46.3	641	10.5	9.8	27.6	25.6	26.5
	Black or African American	847	6.6	3.4	14.4	40.4	35.2	832	14.8	12.1	37.6	21.3	14.2
Ethnicity	Hispanic or Latino	1,547	8.0	7.4	16.4	34.5	33.8	1,504	20.8	13.4	30.3	20.6	14.9
Lumony	Native Hawaiian or Other Pacific Islander	30	3.3	10.0	6.7	50.0	30.0	30	13.3	13.3	40.0	20.0	13.3
	Two or More Races	681	10.9	7.3	15.1	32.7	33.9	663	24.4	14.3	27.8	21.1	12.4
	White	606	6.9	4.6	15.5	35.6	37.3	601	16.1	12.3	30.6	23.6	17.3
	Other/Unknown	8	0.0	12.5	12.5	50.0	25.0	8	12.5	25.0	25.0	12.5	25.0
	Gifted	21	0.0	0.0	19.0	28.6	52.4	21	9.5	14.3	23.8	23.8	28.6
Other	IEP	816	10.2	7.6	28.6	35.3	18.4	722	28.1	22.4	31.4	14.0	4.0
	Migrant	19	10.5	0.0	42.1	10.5	36.8	18	22.2	22.2	22.2	11.1	22.2
	Autism	85	36.5	9.4	24.7	18.8	10.6	59	42.4	16.9	25.4	10.2	5.1
	Deaf-blindness	1	100.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0
	Developmental delay	6	16.7	50.0	33.3	0.0	0.0	5	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	11	0.0	0.0	45.5	45.5	9.1	11	18.2	54.5	18.2	9.1	0.0
	Hearing Impaired	7	14.3	14.3	14.3	28.6	28.6	8	12.5	12.5	50.0	12.5	12.5
	Intellectual Disability	51	25.5	31.4	25.5	17.6	0.0	33	66.7	18.2	15.2	0.0	0.0

Table S2.5: Summative Performance Level by Domain - Grade 4

Cult and the	C 4-4			Listen	ing			_		Readi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Multiple disabilities	23	87.0	4.3	8.7	0.0	0.0	9	88.9	0.0	11.1	0.0	0.0
	Orthopedic impairment	5	20.0	0.0	0.0	60.0	20.0	4	25.0	0.0	75.0	0.0	0.0
	Other health impairment	102	3.9	7.8	35.3	38.2	14.7	93	29.0	22.6	32.3	11.8	4.3
	Specific learning disability	466	1.9	5.4	31.5	39.3	21.9	444	25.0	24.8	32.9	13.3	4.1
	Speech or language impairment	53	1.9	0.0	11.3	50.9	35.8	50	2.0	16.0	40.0	38.0	4.0
	Traumatic brain injury	3	66.7	0.0	0.0	33.3	0.0	2	50.0	0.0	50.0	0.0	0.0
	Visual impairment	3	0.0	0.0	33.3	66.7	0.0	2	0.0	0.0	0.0	100.0	0.0

Subarous	Statua	ľ		Speak	ing			_		Writi	ng		
Subgroup	Status –	Ν	1	2	3	4	5	N	1	2	3	4	5
Total		4,242	13.4	8.7	14.5	26.9	36.4	4,264	15.7	10.2	46.2	15.9	12.1
	Female	1,880	11.8	7.6	13.9	27.1	39.6	1,880	13.5	9.2	46.7	16.9	13.8
Gender	Male	2,309	14.3	9.6	15.0	27.0	34.1	2,330	17.2	10.9	46.0	15.1	10.8
	Missing	53	28.3	9.4	17.0	20.8	24.5	54	25.9	9.3	40.7	14.8	9.3
	American Indian or Alaskan Native	9	22.2	0.0	22.2	22.2	33.3	8	25.0	12.5	25.0	12.5	25.0
	Asian	632	8.5	6.5	14.9	24.4	45.7	642	9.2	9.0	42.2	19.5	20.1
	Black or African American	824	11.4	8.3	15.7	29.0	35.7	827	13.2	8.6	53.1	15.0	10.2
Ethnicity	Hispanic or Latino	1,493	15.2	10.0	14.7	27.5	32.6	1,497	18.6	10.6	44.5	15.8	10.5
	Native Hawaiian or Other Pacific Islander	29	10.3	10.3	10.3	31.0	37.9	30	10.0	10.0	56.7	10.0	13.3
	Two or More Races	658	18.7	7.3	15.2	26.4	32.4	662	22.5	11.2	44.1	13.9	8.3
	White	589	10.9	9.8	11.5	25.8	41.9	590	11.2	11.4	47.5	16.1	13.9
	Other/Unknown	8	12.5	0.0	12.5	37.5	37.5	8	12.5	12.5	50.0	0.0	25.0
	Gifted	19	0.0	5.3	15.8	31.6	47.4	21	4.8	14.3	38.1	14.3	28.6
Other	IEP	739	16.0	14.5	23.8	27.5	18.3	729	25.0	19.9	45.0	6.4	3.7
	Migrant	19	21.1	5.3	26.3	26.3	21.1	19	26.3	21.1	26.3	15.8	10.5
	Autism	53	30.2	32.1	15.1	18.9	3.8	56	35.7	16.1	39.3	7.1	1.8
	Deaf-blindness	1	100.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0
	Developmental delay	6	83.3	16.7	0.0	0.0	0.0	5	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	11	9.1	18.2	27.3	36.4	9.1	11	27.3	27.3	36.4	0.0	9.1
	Hearing Impaired	8	25.0	12.5	12.5	12.5	37.5	8	25.0	12.5	50.0	0.0	12.5
	Intellectual Disability	40	67.5	10.0	15.0	7.5	0.0	35	65.7	14.3	20.0	0.0	0.0

Table S2.5: Summative Performance Level by Domain - Grade 4 (cont.)

Cubara	C 4-4-1			Speak	ing					Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Multiple disabilities	6	100.0	0.0	0.0	0.0	0.0	8	87.5	12.5	0.0	0.0	0.0
	Orthopedic impairment	5	40.0	0.0	40.0	20.0	0.0	5	40.0	20.0	40.0	0.0	0.0
	Other health impairment	97	18.6	15.5	24.7	21.6	19.6	95	29.5	17.9	42.1	6.3	4.2
	Specific learning disability	458	8.5	13.8	26.0	32.1	19.7	449	20.3	22.0	47.2	6.7	3.8
	Speech or language impairment	49	2.0	8.2	20.4	36.7	32.7	51	2.0	17.6	62.7	13.7	3.9
	Traumatic brain injury	2	50.0	0.0	0.0	50.0	0.0	2	50.0	0.0	50.0	0.0	0.0
	Visual impairment	2	0.0	0.0	50.0	0.0	50.0	2	0.0	0.0	100.0	0.0	0.0

Culture	Chatura			Listen	ing					Read	ing		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,951	10.5	7.0	10.1	37.6	34.9	3,829	18.7	14.7	37.6	17.0	12.0
	Female	1,790	9.6	7.3	10.2	37.2	35.9	1,748	17.1	14.8	37.9	17.3	12.9
Gender	Male	2,109	11.0	6.9	10.1	38.2	33.7	2,030	20.0	14.8	37.3	16.6	11.3
	Missing	52	19.2	1.9	5.8	26.9	46.2	51	19.6	5.9	41.2	23.5	9.8
	American Indian or Alaskan Native	10	20.0	10.0	20.0	40.0	10.0	10	20.0	30.0	30.0	10.0	10.0
	Asian	582	7.0	7.7	8.9	36.6	39.7	564	14.7	13.8	37.1	18.4	16.0
	Black or African American	773	12.2	6.5	10.2	39.8	31.3	753	20.5	14.6	39.2	15.4	10.4
Ethnicity	Hispanic or Latino	1,428	11.3	7.6	9.7	37.8	33.6	1,376	19.9	14.2	36.5	18.1	11.3
Lumony	Native Hawaiian or Other Pacific Islander	30	16.7	0.0	10.0	46.7	26.7	27	14.8	11.1	59.3	7.4	7.4
	Two or More Races	625	11.0	6.4	12.6	37.1	32.8	606	20.1	16.7	39.9	14.4	8.9
	White	495	8.3	6.5	9.3	34.7	41.2	485	15.7	14.4	35.7	17.9	16.3
	Other/Unknown	8	0.0	0.0	0.0	25.0	75.0	8	0.0	25.0	12.5	62.5	0.0
	Gifted	12	8.3	0.0	0.0	41.7	50.0	13	7.7	7.7	38.5	23.1	23.1
Other	IEP	810	11.1	10.1	15.6	43.8	19.4	701	23.8	22.7	40.5	8.4	4.6
	Migrant	17	11.8	17.6	5.9	35.3	29.4	16	31.3	12.5	18.8	25.0	12.5
	Autism	57	35.1	17.5	19.3	22.8	5.3	31	45.2	12.9	32.3	6.5	3.2
	Developmental delay	6	16.7	33.3	33.3	16.7	0.0	4	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	15	13.3	6.7	33.3	26.7	20.0	15	40.0	33.3	6.7	6.7	13.3
	Hearing Impaired	6	16.7	16.7	0.0	16.7	50.0	9	44.4	11.1	11.1	22.2	11.1
	Intellectual Disability	63	30.2	25.4	23.8	19.0	1.6	40	57.5	27.5	15.0	0.0	0.0
	Multiple disabilities	37	83.8	8.1	5.4	2.7	0.0	5	80.0	20.0	0.0	0.0	0.0

Table S2.6: Summative Performance Level by Domain - Grade 5

<u>Cubana na</u>	Ctotus			Listen	ing			_		Readi	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	6	0.0	16.7	16.7	50.0	16.7	5	20.0	40.0	40.0	0.0	0.0
	Other health impairment	102	5.9	10.8	15.7	51.0	16.7	95	24.2	24.2	37.9	8.4	5.3
	Specific learning disability	481	2.3	7.1	15.6	51.8	23.3	460	19.1	22.6	45.0	9.3	3.9
	Speech or language impairment	28	3.6	3.6	0.0	46.4	46.4	28	3.6	21.4	50.0	10.7	14.3
	Traumatic brain injury	6	50.0	16.7	0.0	16.7	16.7	3	33.3	0.0	66.7	0.0	0.0
	Visual impairment	3	0.0	33.3	0.0	66.7	0.0	3	0.0	33.3	66.7	0.0	0.0

Qubarrour	Chatura	·		Speak	ing					Writi	ng		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,801	15.6	9.4	22.1	24.1	28.7	3,799	13.3	9.7	54.8	12.1	10.2
	Female	1,717	14.6	9.1	20.7	23.7	31.9	1,730	12.3	9.4	53.9	12.7	11.
Gender	Male	2,033	16.4	9.7	23.0	24.5	26.4	2,018	13.9	10.2	55.5	11.5	8.
	Missing	51	19.6	7.8	33.3	21.6	17.6	51	23.5	0.0	54.9	13.7	7.
	American Indian or Alaskan Native	10	40.0	20.0	0.0	20.0	20.0	10	30.0	10.0	50.0	0.0	10.
	Asian	558	11.8	10.8	22.0	23.7	31.7	563	9.2	9.9	56.0	10.5	14.
	Black or African American	754	17.6	8.8	19.8	28.0	25.9	750	14.3	10.1	55.7	10.3	9.
Ethnicity	Hispanic or Latino	1,379	16.3	9.9	22.3	24.1	27.4	1,356	14.7	9.7	54.2	12.6	8.
Lumony	Native Hawaiian or Other Pacific Islander	29	24.1	3.4	20.7	24.1	27.6	28	10.7	14.3	57.1	7.1	10.
	Two or More Races	589	15.6	10.0	25.6	22.4	26.3	603	14.8	8.8	56.7	13.1	6.
	White	474	14.1	7.2	21.7	20.5	36.5	481	10.8	10.0	50.5	14.6	14.
	Other/Unknown	8	0.0	0.0	25.0	25.0	50.0	8	0.0	0.0	75.0	12.5	12.
	Gifted	13	7.7	0.0	30.8	23.1	38.5	13	0.0	15.4	38.5	30.8	15.
Other	IEP	726	15.4	13.5	31.3	20.9	18.9	707	11.9	18.0	61.1	6.2	2.
	Migrant	16	25.0	12.5	12.5	12.5	37.5	16	25.0	12.5	37.5	12.5	12.
	Autism	32	34.4	18.8	25.0	9.4	12.5	30	26.7	23.3	40.0	6.7	3.
	Developmental delay	4	100.0	0.0	0.0	0.0	0.0	4	50.0	50.0	0.0	0.0	0.
Primary Disability	Emotional disturbance	15	13.3	20.0	40.0	0.0	26.7	16	18.8	31.3	37.5	6.3	6.
inter producinty	Hearing Impaired	7	42.9	0.0	0.0	14.3	42.9	9	44.4	11.1	22.2	22.2	0.
	Intellectual Disability	50	48.0	24.0	20.0	4.0	4.0	39	41.0	20.5	38.5	0.0	0.
	Multiple disabilities	9	77.8	22.2	0.0	0.0	0.0	5	60.0	40.0	0.0	0.0	0.0

Table S2.6: Summative Performance Level by Domain - Grade 5 (cont.)

Cubarroun	C 4-4-1-2			Speak	ing					Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	4	0.0	0.0	75.0	0.0	25.0	4	0.0	0.0	100.0	0.0	0.0
	Other health impairment	94	14.9	20.2	29.8	22.3	12.8	95	12.6	17.9	58.9	8.4	2.1
	Specific learning disability	472	9.7	11.0	33.1	24.4	21.8	468	7.7	17.7	66.2	5.3	3.0
	Speech or language impairment	29	0.0	13.8	37.9	27.6	20.7	28	0.0	3.6	71.4	21.4	3.6
	Traumatic brain injury	4	50.0	0.0	25.0	25.0	0.0	3	33.3	0.0	66.7	0.0	0.0
	Visual impairment	3	0.0	0.0	100.0	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0

Subarous	Status -			Listen	ing					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,343	8.9	6.8	18.4	35.4	30.5	3,247	17.8	17.9	38.1	15.2	11.1
	Female	1,450	8.4	6.3	19.1	38.1	28.0	1,420	16.6	19.1	38.9	15.4	9.9
Gender	Male	1,863	9.3	7.1	17.9	33.1	32.7	1,797	18.6	16.9	37.4	15.1	12.0
	Missing	30	13.3	6.7	20.0	46.7	13.3	30	20.0	23.3	43.3	6.7	6.7
	American Indian or Alaskan Native	8	0.0	0.0	0.0	75.0	25.0	8	0.0	12.5	62.5	0.0	25.0
	Asian	471	6.2	5.1	17.8	31.2	39.7	459	12.4	15.9	36.4	15.9	19.4
	Black or African American	683	7.6	6.3	19.8	37.8	28.6	663	17.6	17.5	40.1	15.4	9.4
Ethnicity	Hispanic or Latino	1,166	12.8	6.3	17.7	34.5	28.8	1,129	20.7	18.2	37.4	14.5	9.2
	Native Hawaiian or Other Pacific Islander	23	0.0	8.7	26.1	43.5	21.7	23	26.1	21.7	26.1	26.1	0.0
	Two or More Races	533	8.6	9.6	19.9	36.6	25.3	516	19.8	20.0	37.0	15.5	7.8
	White	452	4.6	7.3	17.5	36.3	34.3	443	13.5	17.4	40.4	14.9	13.8
	Other/Unknown	7	28.6	0.0	0.0	14.3	57.1	6	16.7	16.7	33.3	16.7	16.7
	Gifted	8	0.0	0.0	25.0	0.0	75.0	7	0.0	28.6	14.3	28.6	28.6
Other	Home Schooled	1	0.0	0.0	0.0	100.0	0.0	1	0.0	0.0	100.0	0.0	0.0
Other	IEP	691	9.7	6.8	28.5	38.8	16.2	618	23.1	25.7	39.5	8.1	3.6
	Migrant	16	18.8	25.0	12.5	12.5	31.3	17	35.3	5.9	29.4	11.8	17.6
	Autism	49	36.7	22.4	16.3	8.2	16.3	31	48.4	16.1	16.1	9.7	9.7
	Developmental delay	4	50.0	0.0	25.0	25.0	0.0	1	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	18	11.1	5.6	38.9	33.3	11.1	16	18.8	25.0	43.8	6.3	6.3
	Hearing Impaired	4	0.0	0.0	25.0	50.0	25.0	6	0.0	33.3	33.3	16.7	16.7
	Intellectual Disability	62	22.6	16.1	40.3	14.5	6.5	48	50.0	31.3	10.4	6.3	2.1

Table S2.7: Summative Performance Level by Domain - Grade 6

Subarour	Statua			Listen	ing					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Multiple disabilities	27	77.8	11.1	11.1	0.0	0.0	13	92.3	7.7	0.0	0.0	0.0
	Other health impairment	80	5.0	6.3	26.3	48.8	13.8	76	25.0	19.7	46.1	5.3	3.9
	Specific learning disability	429	0.9	3.7	29.1	46.4	19.8	407	15.2	28.0	45.0	8.6	3.2
	Speech or language impairment	13	0.0	7.7	30.8	38.5	23.1	14	21.4	14.3	35.7	21.4	7.1
	Traumatic brain injury	5	20.0	20.0	20.0	40.0	0.0	5	40.0	20.0	40.0	0.0	0.0
	Visual impairment	2	0.0	0.0	0.0	100.0	0.0	2	0.0	0.0	100.0	0.0	0.0

Subarous	Statua	·		Speak	ing	,		_		Writi	ng		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,210	12.8	9.7	26.2	23.1	28.2	3,235	12.8	10.4	52.0	14.2	10.7
	Female	1,402	12.3	9.0	26.6	22.5	29.6	1,416	11.1	10.1	53.4	13.8	11.7
Gender	Male	1,778	13.2	10.3	25.7	23.4	27.4	1,790	14.0	10.6	50.6	14.6	10.2
	Missing	30	20.0	6.7	33.3	26.7	13.3	29	20.7	6.9	65.5	6.9	0.0
	American Indian or Alaskan Native	7	0.0	0.0	28.6	28.6	42.9	7	0.0	0.0	85.7	0.0	14.3
	Asian	450	8.4	9.3	22.2	21.3	38.7	456	9.2	8.1	49.6	16.7	16.4
	Black or African American	659	12.6	10.6	27.2	23.8	25.8	665	11.1	11.4	53.4	14.9	9.2
Ethnicity	Hispanic or Latino	1,124	16.5	8.3	27.2	22.5	25.4	1,126	16.6	9.7	52.0	12.6	9.1
Limitity	Native Hawaiian or Other Pacific Islander	22	0.0	31.8	22.7	27.3	18.2	23	13.0	17.4	52.2	13.0	4.3
	Two or More Races	513	14.4	13.3	25.1	23.2	24.0	514	14.6	12.6	51.9	12.6	8.2
	White	429	7.0	7.5	27.7	24.2	33.6	438	7.5	9.8	52.1	16.4	14.2
	Other/Unknown	6	16.7	0.0	0.0	50.0	33.3	6	0.0	16.7	16.7	16.7	50.0
	Gifted	7	0.0	0.0	14.3	28.6	57.1	7	0.0	0.0	57.1	14.3	28.6
Other	Home Schooled	1	0.0	0.0	0.0	100.0	0.0	1	0.0	0.0	100.0	0.0	0.0
Other	IEP	629	12.7	14.8	35.9	22.1	14.5	620	15.5	15.3	59.2	7.6	2.4
	Migrant	16	37.5	18.8	12.5	12.5	18.8	16	37.5	12.5	37.5	6.3	6.3
	Autism	31	41.9	19.4	6.5	19.4	12.9	32	46.9	9.4	31.3	9.4	3.1
	Developmental delay	2	100.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	16	6.3	31.3	43.8	12.5	6.3	17	11.8	17.6	64.7	0.0	5.9
	Hearing Impaired	3	0.0	0.0	0.0	33.3	66.7	5	0.0	0.0	80.0	20.0	0.0
	Intellectual Disability	54	35.2	31.5	22.2	9.3	1.9	50	38.0	26.0	32.0	2.0	2.0

Table S2.7: Summative Performance Level by Domain - Grade 6 (cont.)

Subaroun	Statua			Speak	ing					Writi	ng		
Subgroup	Status -	Ν	1	2	3	4	5	N	1	2	3	4	5
	Multiple disabilities	12	83.3	8.3	8.3	0.0	0.0	12	91.7	8.3	0.0	0.0	0.0
	Other health impairment	76	9.2	11.8	48.7	23.7	6.6	76	11.8	15.8	64.5	5.3	2.6
	Specific learning disability	417	5.3	12.5	39.3	24.9	18.0	408	7.8	15.2	65.7	8.8	2.5
	Speech or language impairment	12	25.0	0.0	25.0	33.3	16.7	13	15.4	7.7	69.2	7.7	0.0
	Traumatic brain injury	4	25.0	25.0	50.0	0.0	0.0	5	40.0	0.0	60.0	0.0	0.0
	Visual impairment	2	0.0	0.0	50.0	50.0	0.0	2	0.0	0.0	50.0	50.0	0.0

Subarous	Statua	,		Listen	ing					Read	ing		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,224	15.5	8.7	32.9	23.8	19.1	3,169	27.5	24.3	34.4	9.0	4.8
	Female	1,434	15.4	8.6	33.9	22.3	19.7	1,415	26.1	24.1	34.9	9.3	5.5
Gender	Male	1,772	15.3	8.8	32.2	25.0	18.6	1,737	28.4	24.6	34.0	8.8	4.1
	Missing	18	33.3	5.6	27.8	22.2	11.1	17	41.2	17.6	29.4	5.9	5.9
	American Indian or Alaskan Native	5	20.0	20.0	40.0	20.0	0.0	5	20.0	40.0	40.0	0.0	0.0
	Asian	435	6.9	9.4	37.2	23.4	23.0	429	21.0	24.2	36.1	11.0	7.7
	Black or African American	698	12.6	7.9	34.7	23.4	21.5	689	22.6	25.3	36.6	10.2	5.4
Ethnicity	Hispanic or Latino	1,143	19.2	8.7	31.9	24.1	15.9	1,113	31.7	24.3	33.5	7.2	3.2
Lumony	Native Hawaiian or Other Pacific Islander	31	9.7	6.5	45.2	22.6	16.1	31	29.0	19.4	41.9	3.2	6.5
	Two or More Races	522	23.0	8.8	32.8	21.1	14.4	514	35.4	23.5	30.5	8.2	2.3
	White	388	9.3	9.3	27.3	27.6	26.5	386	20.5	23.8	35.8	11.9	8.0
	Other/Unknown	2	50.0	0.0	0.0	50.0	0.0	2	50.0	50.0	0.0	0.0	0.0
	Gifted	9	0.0	11.1	22.2	22.2	44.4	9	11.1	11.1	33.3	33.3	11.1
Other	IEP	633	12.6	11.5	42.7	23.7	9.5	590	31.4	31.7	31.9	3.6	1.5
	Migrant	11	27.3	9.1	27.3	0.0	36.4	11	45.5	9.1	9.1	27.3	9.1
	Autism	25	32.0	20.0	32.0	12.0	4.0	19	47.4	15.8	31.6	0.0	5.3
	Developmental delay	5	60.0	40.0	0.0	0.0	0.0	3	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	8	37.5	0.0	25.0	25.0	12.5	7	28.6	0.0	71.4	0.0	0.0
	Hearing Impaired	3	0.0	33.3	0.0	33.3	33.3	8	37.5	25.0	12.5	12.5	12.5
	Intellectual Disability	52	32.7	25.0	38.5	3.8	0.0	40	62.5	25.0	12.5	0.0	0.0
	Multiple disabilities	22	72.7	22.7	4.5	0.0	0.0	12	91.7	8.3	0.0	0.0	0.0

Table S2.8: Summative Performance Level by Domain - Grade 7

Cubarrous	64-4-1			Listen	ing			_		Readi	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	4	0.0	25.0	25.0	50.0	0.0	4	25.0	50.0	25.0	0.0	0.0
	Other health impairment	100	13.0	7.0	46.0	28.0	6.0	95	25.3	35.8	35.8	2.1	1.1
	Specific learning disability	387	3.9	9.0	47.0	27.4	12.7	376	25.8	34.6	33.8	4.5	1.3
	Speech or language impairment	13	7.7	7.7	23.1	53.8	7.7	13	23.1	23.1	46.2	0.0	7.7
	Traumatic brain injury	9	22.2	22.2	44.4	0.0	11.1	8	37.5	12.5	50.0	0.0	0.0
	Visual impairment	3	33.3	33.3	0.0	33.3	0.0	3	66.7	0.0	0.0	33.3	0.0

Cubanaua	Ctotus			Speak	ing					Writi	ng		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,097	16.5	11.5	30.6	19.4	22.1	3,131	23.4	17.2	43.4	9.4	6.5
	Female	1,377	16.2	10.1	28.8	19.2	25.7	1,399	22.2	14.5	44.7	10.7	7.8
Gender	Male	1,704	16.5	12.6	32.2	19.7	19.1	1,714	24.3	19.4	42.4	8.4	5.5
	Missing	16	31.3	12.5	12.5	12.5	31.3	18	33.3	16.7	38.9	5.6	5.6
	American Indian or Alaskan Native	4	25.0	25.0	0.0	25.0	25.0	5	20.0	20.0	60.0	0.0	0.0
	Asian	422	10.2	10.2	30.6	19.9	29.1	425	17.6	17.2	47.8	9.4	8.0
	Black or African American	667	12.3	12.1	32.4	19.8	23.4	677	18.6	19.5	44.2	10.5	7.2
Ethnicity	Hispanic or Latino	1,109	20.3	11.5	30.1	18.6	19.5	1,102	27.7	16.2	41.7	9.1	5.3
Lumony	Native Hawaiian or Other Pacific Islander	30	6.7	23.3	43.3	13.3	13.3	31	19.4	22.6	38.7	9.7	9.7
	Two or More Races	494	25.1	11.1	30.8	19.0	14.0	508	31.3	16.3	40.2	8.7	3.5
	White	369	8.7	10.8	27.6	21.7	31.2	381	15.7	16.5	47.0	9.7	11.0
	Other/Unknown	2	50.0	0.0	50.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0
	Gifted	9	0.0	11.1	33.3	22.2	33.3	9	11.1	11.1	33.3	33.3	11.1
Other	IEP	589	11.7	17.0	40.4	16.1	14.8	591	23.7	22.0	47.5	5.8	1.0
	Migrant	10	40.0	0.0	20.0	10.0	30.0	11	36.4	0.0	36.4	18.2	9.1
	Autism	21	23.8	19.0	42.9	4.8	9.5	19	36.8	10.5	47.4	5.3	0.0
	Developmental delay	3	66.7	33.3	0.0	0.0	0.0	3	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	6	50.0	16.7	16.7	16.7	0.0	6	33.3	0.0	66.7	0.0	0.0
, , , , , , , , , , , , , , , , , , ,	Hearing Impaired	3	0.0	0.0	33.3	0.0	66.7	5	40.0	0.0	20.0	40.0	0.0
	Intellectual Disability	43	27.9	23.3	46.5	2.3	0.0	43	60.5	20.9	16.3	2.3	0.0
	Multiple disabilities	13	69.2	23.1	7.7	0.0	0.0	13	76.9	23.1	0.0	0.0	0.0

Table S2.8: Summative Performance Level by Domain - Grade 7 (cont.)

Cubarroun	Ctotus			Speak	ing					Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	3	0.0	0.0	66.7	33.3	0.0	4	25.0	0.0	75.0	0.0	0.0
	Other health impairment	98	11.2	13.3	40.8	18.4	16.3	93	23.7	25.8	46.2	3.2	1.1
	Specific learning disability	376	5.6	17.0	41.8	18.6	17.0	380	15.8	22.4	53.7	7.1	1.1
	Speech or language impairment	11	9.1	18.2	45.5	9.1	18.2	13	15.4	23.1	53.8	0.0	7.7
	Traumatic brain injury	6	33.3	16.7	33.3	16.7	0.0	7	28.6	28.6	42.9	0.0	0.0
	Visual impairment	3	66.7	0.0	0.0	0.0	33.3	3	66.7	0.0	33.3	0.0	0.0

Cubana	C4-1-1-2			Listen	ing					Read	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,349	13.9	9.2	27.7	24.7	24.5	3,267	26.8	19.3	39.9	8.4	5.6
	Female	1,417	13.1	9.7	27.6	24.6	24.9	1,391	25.6	19.1	40.8	8.2	6.3
Gender	Male	1,899	14.3	8.7	27.8	24.9	24.3	1,843	27.3	19.5	39.4	8.7	5.0
	Missing	33	18.2	15.2	33.3	15.2	18.2	33	45.5	12.1	33.3	3.0	6.1
	American Indian or Alaskan Native	6	16.7	0.0	16.7	16.7	50.0	6	16.7	0.0	83.3	0.0	0.0
	Asian	493	6.7	7.7	30.2	23.7	31.6	486	19.5	18.3	43.2	11.3	7.6
	Black or African American	662	11.5	9.8	29.5	24.9	24.3	659	26.9	18.8	39.3	10.0	5.0
Ethnicity	Hispanic or Latino	1,196	16.5	9.5	26.3	24.9	22.7	1,151	28.8	19.8	39.7	6.3	5.4
Lumeny	Native Hawaiian or Other Pacific Islander	25	4.0	12.0	44.0	20.0	20.0	24	20.8	25.0	41.7	8.3	4.2
	Two or More Races	559	20.4	10.0	23.4	23.4	22.7	549	34.2	16.9	35.0	8.9	4.9
	White	402	10.0	7.5	31.3	27.4	23.9	386	18.7	23.1	44.6	8.0	5.7
	Other/Unknown	6	33.3	33.3	16.7	0.0	16.7	6	66.7	16.7	0.0	16.7	0.0
	Gifted	6	0.0	16.7	16.7	33.3	33.3	6	33.3	0.0	33.3	16.7	16.7
Other	IEP	595	11.3	10.9	39.0	24.0	14.8	541	29.6	29.6	34.0	3.9	3.0
	Migrant	16	25.0	12.5	31.3	18.8	12.5	16	31.3	31.3	31.3	0.0	6.3
	Autism	32	31.3	15.6	34.4	9.4	9.4	26	42.3	23.1	19.2	15.4	0.0
	Developmental delay	6	33.3	50.0	0.0	16.7	0.0	4	75.0	25.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	13	0.0	23.1	38.5	30.8	7.7	13	30.8	23.1	46.2	0.0	0.0
2 Doubling	Hearing Impaired	3	33.3	0.0	0.0	66.7	0.0	6	66.7	0.0	33.3	0.0	0.0
	Intellectual Disability	53	26.4	32.1	34.0	3.8	3.8	34	70.6	14.7	14.7	0.0	0.0
	Multiple disabilities	24	83.3	4.2	12.5	0.0	0.0	12	91.7	8.3	0.0	0.0	0.0

Table S2.9: Summative Performance Level by Domain - Grade 8

Cubarroun	04-14-1-2			Listen	ing			_		Readi	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	4	0.0	0.0	75.0	0.0	25.0	4	25.0	25.0	50.0	0.0	0.0
	Other health impairment	73	9.6	9.6	34.2	30.1	16.4	70	27.1	31.4	34.3	2.9	4.3
	Specific learning disability	377	3.4	7.4	43.2	27.9	18.0	363	22.6	32.8	37.2	4.1	3.3
	Speech or language impairment	5	0.0	0.0	40.0	40.0	20.0	5	0.0	40.0	40.0	0.0	20.0
	Traumatic brain injury	1	0.0	0.0	0.0	100.0	0.0	1	0.0	0.0	100.0	0.0	0.0
	Visual impairment	2	50.0	0.0	0.0	50.0	0.0	1	0.0	0.0	100.0	0.0	0.0

Subarous	Statua			Speak	ing					Writi	ng		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,222	14.9	10.0	27.2	18.9	29.1	3,254	22.5	16.3	42.8	10.0	8.4
	Female	1,357	14.5	9.5	24.5	18.6	32.9	1,386	22.1	16.2	40.3	11.5	10.0
Gender	Male	1,833	15.1	10.4	28.8	19.1	26.6	1,836	22.9	16.2	45.0	8.8	7.1
	Missing	32	15.6	6.3	50.0	12.5	15.6	32	21.9	34.4	28.1	6.3	9.4
	American Indian or Alaskan Native	6	16.7	0.0	33.3	0.0	50.0	6	16.7	0.0	83.3	0.0	0.0
	Asian	479	9.0	9.4	25.7	20.3	35.7	481	16.8	18.9	43.2	11.2	9.8
	Black or African American	632	11.4	12.7	28.6	18.8	28.5	648	20.4	18.1	43.5	8.6	9.4
Ethnicity	Hispanic or Latino	1,149	17.6	9.3	28.2	17.5	27.4	1,154	25.8	14.7	41.1	10.1	8.2
Lunicity	Native Hawaiian or Other Pacific Islander	24	16.7	8.3	29.2	37.5	8.3	25	24.0	12.0	56.0	4.0	4.0
	Two or More Races	542	22.1	10.3	23.8	18.1	25.6	547	29.6	15.5	38.2	10.2	6.4
	White	384	9.1	8.1	27.9	21.9	33.1	387	12.7	16.8	51.9	10.1	8.5
	Other/Unknown	6	33.3	0.0	33.3	0.0	33.3	6	66.7	16.7	0.0	16.7	0.0
	Gifted	7	0.0	0.0	42.9	0.0	57.1	6	16.7	16.7	50.0	0.0	16.7
Other	IEP	544	10.8	15.3	37.1	18.6	18.2	538	21.0	25.7	43.9	6.5	3.0
	Migrant	12	25.0	8.3	41.7	8.3	16.7	16	43.8	6.3	37.5	12.5	0.0
	Autism	26	26.9	7.7	38.5	11.5	15.4	23	34.8	17.4	39.1	4.3	4.3
	Developmental delay	5	40.0	60.0	0.0	0.0	0.0	4	75.0	25.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	13	7.7	23.1	38.5	7.7	23.1	13	30.8	30.8	23.1	15.4	0.0
	Hearing Impaired	3	0.0	33.3	33.3	0.0	33.3	5	60.0	0.0	20.0	20.0	0.0
	Intellectual Disability	44	31.8	36.4	29.5	0.0	2.3	37	62.2	24.3	13.5	0.0	0.0
	Multiple disabilities	11	63.6	18.2	18.2	0.0	0.0	11	81.8	18.2	0.0	0.0	0.0

Table S2.9: Summative Performance Level by Domain - Grade 8 (cont.)

0	04-4			Speak	ing					Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	4	0.0	0.0	50.0	50.0	0.0	3	0.0	33.3	66.7	0.0	0.0
	Other health impairment	70	12.9	10.0	34.3	17.1	25.7	70	18.6	21.4	47.1	7.1	5.7
	Specific learning disability	362	5.8	13.3	38.7	22.7	19.6	367	14.2	26.7	49.0	7.1	3.0
	Speech or language impairment	4	0.0	0.0	75.0	0.0	25.0	3	0.0	66.7	33.3	0.0	0.0
	Traumatic brain injury	0						0					
	Visual impairment	1	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0

Subarous	Status -	·		Listen	ing					Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		4,157	23.5	12.5	33.4	17.9	12.7	4,149	35.9	24.1	33.4	4.0	2.7
	Female	1,761	22.8	11.6	35.0	17.2	13.3	1,754	33.8	25.0	34.9	3.5	2.8
Gender	Male	2,364	23.9	13.1	32.3	18.6	12.1	2,360	37.5	23.6	32.2	4.2	2.5
	Missing	32	31.3	9.4	21.9	12.5	25.0	35	37.1	11.4	37.1	8.6	5.7
	American Indian or Alaskan Native	3	0.0	33.3	66.7	0.0	0.0	3	33.3	66.7	0.0	0.0	0.0
	Asian	551	7.1	10.2	37.4	23.6	21.8	551	17.8	24.9	44.5	6.5	6.4
	Black or African American	982	19.5	15.0	35.6	17.7	12.2	990	33.5	26.3	33.5	4.2	2.4
Ethnicity	Hispanic or Latino	1,346	29.6	11.5	31.6	16.8	10.5	1,333	42.1	23.0	30.5	2.6	1.7
Linnony	Native Hawaiian or Other Pacific Islander	21	9.5	14.3	42.9	23.8	9.5	20	25.0	35.0	40.0	0.0	0.0
	Two or More Races	797	34.6	12.8	28.4	14.8	9.4	803	45.6	23.2	26.7	2.7	1.9
	White	443	15.1	12.0	36.8	20.1	16.0	435	28.3	22.5	39.8	6.4	3.0
	Other/Unknown	14	21.4	7.1	35.7	28.6	7.1	14	28.6	21.4	35.7	14.3	0.0
	Gifted	7	0.0	28.6	28.6	0.0	42.9	7	14.3	28.6	14.3	42.9	0.0
Other	IEP	587	15.0	18.1	46.0	14.5	6.5	560	38.0	31.8	27.9	1.8	0.5
	Migrant	14	35.7	7.1	28.6	7.1	21.4	14	50.0	7.1	28.6	0.0	14.3
	Autism	26	38.5	15.4	34.6	11.5	0.0	21	57.1	19.0	19.0	4.8	0.0
	Deaf-blindness	3	33.3	33.3	33.3	0.0	0.0	3	100.0	0.0	0.0	0.0	0.0
	Developmental delay	9	44.4	33.3	11.1	11.1	0.0	7	71.4	28.6	0.0	0.0	0.0
Primary Disability	Emotional disturbance	8	12.5	37.5	37.5	0.0	12.5	8	62.5	25.0	12.5	0.0	0.0
	Hearing Impaired	8	12.5	0.0	50.0	12.5	25.0	14	28.6	35.7	35.7	0.0	0.0
	Intellectual Disability	49	28.6	34.7	34.7	2.0	0.0	44	75.0	20.5	4.5	0.0	0.0

Table S2.10: Summative Performance Level by Domain - Grade 9

Cubana	C 4-4			Listen	ing					Readi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Multiple disabilities	20	85.0	5.0	10.0	0.0	0.0	6	66.7	16.7	16.7	0.0	0.0
	Orthopedic impairment	4	0.0	50.0	25.0	0.0	25.0	4	50.0	25.0	25.0	0.0	0.0
	Other health impairment	92	12.0	13.0	48.9	16.3	9.8	90	40.0	30.0	25.6	3.3	1.1
	Specific learning disability	356	6.2	17.1	52.8	17.7	6.2	352	28.7	35.8	33.5	1.4	0.6
	Speech or language impairment	9	0.0	11.1	44.4	22.2	22.2	9	11.1	33.3	44.4	11.1	0.0
	Traumatic brain injury	4	50.0	25.0	25.0	0.0	0.0	4	75.0	25.0	0.0	0.0	0.0
	Visual impairment	3	33.3	33.3	0.0	0.0	33.3	3	66.7	0.0	0.0	33.3	0.0

Cub ana un	Ctotus			Speak	ing	ĺ				Writi	ng		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		4,095	20.1	16.3	32.6	15.4	15.6	4,110	32.5	20.5	39.5	5.3	:
	Female	1,735	18.4	16.3	31.5	16.9	16.9	1,743	30.8	19.4	41.5	5.7	
Gender	Male	2,328	21.3	16.4	33.6	14.2	14.5	2,335	33.7	21.6	37.9	5.0	
	Missing	32	25.0	6.3	21.9	21.9	25.0	32	37.5	0.0	46.9	9.4	
	American Indian or Alaskan Native	4	0.0	0.0	75.0	25.0	0.0	3	33.3	66.7	0.0	0.0	
	Asian	539	8.0	11.3	34.5	18.7	27.5	542	16.4	23.2	47.0	8.9	
	Black or African American	970	14.0	19.8	35.5	17.4	13.3	974	29.8	21.9	41.2	5.0	
Ethnicity	Hispanic or Latino	1,305	26.0	16.1	31.1	13.4	13.4	1,326	37.1	19.3	37.6	4.3	
Lumony	Native Hawaiian or Other Pacific Islander	19	15.8	15.8	26.3	26.3	15.8	19	21.1	26.3	47.4	5.3	
	Two or More Races	805	31.4	16.4	29.9	11.8	10.4	799	43.8	18.6	32.5	3.4	
	White	439	11.2	15.0	33.7	18.5	21.6	434	24.4	20.5	44.2	8.3	
	Other/Unknown	14	7.1	14.3	28.6	21.4	28.6	13	30.8	15.4	46.2	7.7	
	Gifted	6	0.0	16.7	50.0	0.0	33.3	7	0.0	42.9	57.1	0.0	
Other	IEP	561	13.2	18.5	46.5	13.5	8.2	548	25.0	32.1	39.2	2.7	
	Migrant	13	38.5	0.0	23.1	23.1	15.4	13	30.8	23.1	30.8	0.0	1
	Autism	20	30.0	15.0	35.0	15.0	5.0	19	52.6	26.3	21.1	0.0	
	Deaf-blindness	3	33.3	66.7	0.0	0.0	0.0	3	66.7	33.3	0.0	0.0	
	Developmental delay	9	44.4	22.2	22.2	11.1	0.0	6	50.0	16.7	33.3	0.0	
Primary Disability	Emotional disturbance	6	50.0	33.3	16.7	0.0	0.0	8	50.0	25.0	25.0	0.0	
	Hearing Impaired	8	12.5	0.0	37.5	12.5	37.5	10	30.0	30.0	40.0	0.0	
	Intellectual Disability	48	29.2	33.3	33.3	4.2	0.0	46	50.0	34.8	15.2	0.0	

Table S2.10: Summative Performance Level by Domain - Grade 9 (cont.)

Qubarroun	C 4-4-1-2			Speak	ing					Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Multiple disabilities	8	62.5	0.0	25.0	0.0	12.5	5	60.0	0.0	40.0	0.0	0.0
	Orthopedic impairment	4	0.0	75.0	0.0	0.0	25.0	3	33.3	33.3	33.3	0.0	0.0
	Other health impairment	90	12.2	12.2	50.0	14.4	11.1	89	21.3	34.8	36.0	3.4	4.5
	Specific learning disability	354	6.5	18.1	51.7	15.5	8.2	349	17.2	33.2	45.8	3.4	0.3
	Speech or language impairment	9	0.0	11.1	55.6	22.2	11.1	9	22.2	11.1	66.7	0.0	0.0
	Traumatic brain injury	4	25.0	50.0	25.0	0.0	0.0	4	75.0	25.0	0.0	0.0	0.0
	Visual impairment	3	33.3	33.3	0.0	0.0	33.3	3	66.7	0.0	33.3	0.0	0.0

Subarous	Statua	, i i i i i i i i i i i i i i i i i i i		Listen	ing			_		Read	ing		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,573	15.6	13.2	33.2	20.0	18.0	3,531	28.2	22.7	38.1	6.5	4.6
	Female	1,551	13.7	13.7	33.3	20.7	18.6	1,532	27.0	22.7	39.2	6.5	4.8
Gender	Male	2,005	17.2	12.8	33.2	19.2	17.7	1,982	29.2	22.7	37.1	6.6	4.4
	Missing	17	11.8	5.9	23.5	47.1	11.8	17	17.6	23.5	52.9	5.9	0.0
	American Indian or Alaskan Native	11	18.2	18.2	45.5	0.0	18.2	10	40.0	30.0	30.0	0.0	0.0
	Asian	552	6.9	9.6	35.9	22.3	25.4	549	14.6	23.1	46.4	8.7	7.1
	Black or African American	822	12.2	13.6	36.9	20.1	17.3	825	28.6	25.3	35.6	6.8	3.6
Ethnicity	Hispanic or Latino	1,204	23.3	13.4	29.5	19.7	14.1	1,189	35.2	20.4	36.5	4.8	3.2
Linnony	Native Hawaiian or Other Pacific Islander	23	17.4	17.4	30.4	17.4	17.4	22	22.7	27.3	36.4	9.1	4.5
	Two or More Races	568	17.1	14.3	34.0	17.3	17.4	558	29.4	24.9	35.8	5.2	4.7
	White	387	9.0	14.7	31.5	22.2	22.5	373	23.3	19.0	40.2	10.2	7.2
	Other/Unknown	6	33.3	0.0	50.0	16.7	0.0	5	20.0	80.0	0.0	0.0	0.0
	Gifted	5	0.0	0.0	20.0	40.0	40.0	5	20.0	0.0	40.0	20.0	20.0
Other	IEP	501	14.0	14.6	42.5	19.6	9.4	458	27.5	31.4	36.9	3.9	0.2
	Migrant	19	21.1	26.3	47.4	5.3	0.0	19	42.1	31.6	26.3	0.0	0.0
	Autism	29	44.8	0.0	27.6	17.2	10.3	19	31.6	15.8	42.1	10.5	0.0
	Developmental delay	5	40.0	20.0	40.0	0.0	0.0	5	100.0	0.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	8	0.0	0.0	50.0	37.5	12.5	8	12.5	12.5	62.5	12.5	0.0
	Hearing Impaired	5	40.0	20.0	20.0	20.0	0.0	6	33.3	33.3	33.3	0.0	0.0
	Intellectual Disability	39	28.2	28.2	41.0	2.6	0.0	34	58.8	26.5	14.7	0.0	0.0
	Multiple disabilities	23	73.9	17.4	8.7	0.0	0.0	7	85.7	0.0	14.3	0.0	0.0

Table S2.11: Summative Performance Level by Domain - Grade 10

0	04-4-4-			Listen	ing					Readi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	1	100.0	0.0	0.0	0.0	0.0	0	-				
	Other health impairment	59	11.9	23.7	42.4	18.6	3.4	59	35.6	33.9	30.5	0.0	0.0
	Specific learning disability	307	4.2	13.0	45.9	23.8	13.0	297	19.9	33.7	41.4	4.7	0.3
	Speech or language impairment	8	0.0	0.0	62.5	25.0	12.5	8	0.0	37.5	62.5	0.0	0.0
	Traumatic brain injury	5	40.0	20.0	40.0	0.0	0.0	5	80.0	20.0	0.0	0.0	0.0
	Visual impairment	5	40.0	0.0	20.0	20.0	20.0	3	33.3	0.0	33.3	33.3	0.0

Cult and cut	64-4			Speak	ing					Writi	ng		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		3,475	12.1	16.8	34.1	15.5	21.4	3,516	25.3	20.7	42.0	7.4	
	Female	1,502	10.9	16.3	35.6	15.8	21.4	1,532	23.7	19.9	43.1	8.2	
Gender	Male	1,956	13.0	17.3	33.0	15.1	21.5	1,967	26.6	21.4	41.1	6.8	
	Missing	17	17.6	0.0	29.4	35.3	17.6	17	17.6	11.8	47.1	17.6	
	American Indian or Alaskan Native	11	18.2	36.4	18.2	9.1	18.2	10	40.0	10.0	40.0	10.0	
	Asian	544	5.5	11.6	36.0	15.3	31.6	549	13.5	23.3	48.8	9.1	
	Black or African American	811	9.6	17.8	36.3	17.0	19.4	824	23.1	22.1	43.6	7.3	
Ethnicity	Hispanic or Latino	1,163	17.5	18.6	32.5	14.2	17.2	1,177	33.1	17.7	40.0	5.6	
Lumeny	Native Hawaiian or Other Pacific Islander	22	9.1	13.6	36.4	9.1	31.8	22	18.2	27.3	31.8	13.6	
	Two or More Races	555	14.2	17.1	34.1	15.1	19.5	559	28.4	22.4	37.0	7.0	
	White	364	6.6	16.2	31.6	18.4	27.2	369	18.4	20.6	42.3	11.4	
	Other/Unknown	5	40.0	0.0	60.0	0.0	0.0	6	16.7	16.7	66.7	0.0	
	Gifted	5	0.0	20.0	20.0	40.0	20.0	5	0.0	20.0	40.0	0.0	
Other	IEP	464	10.6	17.5	42.5	16.2	13.4	451	21.5	25.9	47.0	4.2	
	Migrant	18	11.1	33.3	44.4	5.6	5.6	18	50.0	22.2	27.8	0.0	
	Autism	19	21.1	10.5	31.6	26.3	10.5	18	22.2	22.2	33.3	16.7	
	Developmental delay	7	28.6	42.9	28.6	0.0	0.0	5	100.0	0.0	0.0	0.0	
Primary Disability	Emotional disturbance	9	0.0	0.0	44.4	33.3	22.2	8	0.0	25.0	62.5	12.5	
, <u> </u>	Hearing Impaired	5	40.0	0.0	40.0	0.0	20.0	6	50.0	16.7	33.3	0.0	
	Intellectual Disability	39	38.5	25.6	30.8	5.1	0.0	33	42.4	36.4	21.2	0.0	
	Multiple disabilities	7	42.9	42.9	14.3	0.0	0.0	7	85.7	14.3	0.0	0.0	

Table S2.11: Summative Performance Level by Domain - Grade 10 (cont.)

0	04-4			Speak	ing					Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	1	100.0	0.0	0.0	0.0	0.0	0	-	-		-	
	Other health impairment	57	12.3	28.1	45.6	7.0	7.0	56	28.6	33.9	35.7	1.8	0.0
	Specific learning disability	298	4.0	14.4	45.0	19.8	16.8	295	14.9	24.4	54.6	4.7	1.4
	Speech or language impairment	8	12.5	12.5	50.0	25.0	0.0	8	0.0	12.5	75.0	12.5	0.0
	Traumatic brain injury	5	20.0	40.0	40.0	0.0	0.0	5	80.0	20.0	0.0	0.0	0.0
	Visual impairment	3	0.0	0.0	33.3	0.0	66.7	3	0.0	33.3	33.3	0.0	33.3

Cub ana un	C4-sture	· ·		Listen	ing					Read	ing		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		2,927	9.8	11.3	37.1	20.7	21.0	2,896	20.9	26.7	39.2	7.8	5.4
	Female	1,326	10.4	10.9	35.3	22.6	20.7	1,308	19.9	26.5	40.4	8.3	4.8
Gender	Male	1,576	9.4	11.7	38.3	19.4	21.3	1,565	21.7	26.9	38.1	7.4	5.9
	Missing	25	8.0	12.0	56.0	4.0	20.0	23	21.7	26.1	43.5	4.3	4.3
	American Indian or Alaskan Native	3	0.0	0.0	33.3	0.0	66.7	3	0.0	0.0	100.0	0.0	0.0
	Asian	533	5.3	8.3	38.6	22.1	25.7	533	14.4	26.6	41.7	8.8	8.4
	Black or African American	763	10.2	11.0	41.7	19.5	17.6	760	21.4	30.9	37.2	6.4	3.9
Ethnicity	Hispanic or Latino	900	14.3	12.6	34.8	20.8	17.6	883	25.9	26.0	37.4	6.8	3.9
Lumony	Native Hawaiian or Other Pacific Islander	15	6.7	13.3	46.7	20.0	13.3	15	20.0	40.0	40.0	0.0	0.0
	Two or More Races	341	7.9	11.4	34.6	22.0	24.0	342	17.5	25.7	42.7	8.8	5.3
	White	365	6.6	13.4	32.9	20.0	27.1	355	20.0	20.3	40.0	11.3	8.5
	Other/Unknown	7	14.3	14.3	42.9	14.3	14.3	5	20.0	20.0	60.0	0.0	0.0
	Gifted	3	0.0	0.0	33.3	33.3	33.3	3	0.0	0.0	66.7	33.3	0.0
Other	IEP	424	14.2	15.6	42.5	19.3	8.5	403	29.8	32.0	33.7	3.5	1.0
	Migrant	33	33.3	18.2	30.3	6.1	12.1	32	43.8	34.4	12.5	6.3	3.1
	Autism	13	23.1	30.8	38.5	7.7	0.0	9	44.4	22.2	33.3	0.0	0.0
	Developmental delay	7	57.1	14.3	28.6	0.0	0.0	7	71.4	28.6	0.0	0.0	0.0
Primary Disability	Emotional disturbance	14	0.0	14.3	78.6	7.1	0.0	14	35.7	50.0	14.3	0.0	0.0
, <u> </u>	Hearing Impaired	3	33.3	33.3	33.3	0.0	0.0	6	83.3	0.0	16.7	0.0	0.0
	Intellectual Disability	41	31.7	24.4	34.1	9.8	0.0	35	51.4	34.3	14.3	0.0	0.0
	Multiple disabilities	19	73.7	21.1	5.3	0.0	0.0	9	88.9	11.1	0.0	0.0	0.0

Table S2.12: Summative Performance Level by Domain - Grade 11

C ubana	64-4-1			Listen	ing			_		Readi	ing		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	1	0.0	100.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0
	Other health impairment	51	7.8	13.7	49.0	21.6	7.8	50	26.0	24.0	46.0	4.0	0.0
	Specific learning disability	266	8.3	12.8	44.0	23.3	11.7	263	22.8	33.8	37.6	4.6	1.1
	Speech or language impairment	3	0.0	0.0	33.3	33.3	33.3	3	0.0	33.3	33.3	0.0	33.3
	Traumatic brain injury	3	0.0	33.3	33.3	33.3	0.0	3	33.3	33.3	33.3	0.0	0.0
	Visual impairment	4	25.0	25.0	50.0	0.0	0.0	2	0.0	100.0	0.0	0.0	0.0

Cub ana un	Ct-tu-	, i		Speak		, on a g				Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
Total		2,832	8.0	14.0	34.2	18.6	25.2	2,880	18.0	22.0	45.8	8.1	6
	Female	1,276	8.1	13.6	32.8	19.7	25.9	1,302	17.9	20.3	48.2	7.2	6
Gender	Male	1,535	7.9	14.3	35.0	18.0	24.7	1,556	18.3	23.4	43.6	9.0	į
	Missing	21	4.8	9.5	61.9	4.8	19.0	22	4.5	31.8	59.1	0.0	4
	American Indian or Alaskan Native	3	0.0	33.3	0.0	0.0	66.7	3	0.0	0.0	66.7	33.3	
	Asian	528	3.8	11.7	34.1	18.2	32.2	534	11.2	26.2	45.1	8.8	
	Black or African American	750	7.3	16.3	37.7	17.9	20.8	751	18.4	24.5	45.4	5.7	
Ethnicity	Hispanic or Latino	849	13.5	13.4	33.5	19.0	20.6	881	24.0	19.4	44.8	8.1	
Lumony	Native Hawaiian or Other Pacific Islander	16	0.0	12.5	37.5	31.3	18.8	15	13.3	33.3	46.7	6.7	
	Two or More Races	335	6.9	13.4	35.8	16.7	27.2	340	15.0	20.0	48.2	10.6	
	White	346	3.8	13.9	27.2	21.7	33.5	351	15.7	18.5	47.9	9.7	
	Other/Unknown	5	0.0	40.0	40.0	20.0	0.0	5	20.0	40.0	20.0	20.0	
	Gifted	3	0.0	0.0	0.0	33.3	66.7	3	0.0	0.0	66.7	33.3	
Other	IEP	405	12.1	16.5	38.3	18.5	14.6	398	23.4	24.9	45.0	4.8	
	Migrant	32	25.0	25.0	21.9	15.6	12.5	33	45.5	21.2	24.2	0.0	
	Autism	11	27.3	27.3	27.3	18.2	0.0	8	37.5	12.5	50.0	0.0	
	Developmental delay	5	40.0	40.0	0.0	0.0	20.0	6	66.7	16.7	16.7	0.0	
Primary Disability	Emotional disturbance	12	16.7	16.7	58.3	8.3	0.0	13	38.5	46.2	15.4	0.0	
inter producinty	Hearing Impaired	2	0.0	50.0	50.0	0.0	0.0	5	60.0	20.0	20.0	0.0	
	Intellectual Disability	40	37.5	32.5	22.5	5.0	2.5	35	51.4	25.7	22.9	0.0	
	Multiple disabilities	10	60.0	40.0	0.0	0.0	0.0	10	90.0	10.0	0.0	0.0	

Table S2.12: Summative Performance Level by Domain - Grade 11 (cont.)

Quikarraun	Ctotus			Speak	ing					Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
	Orthopedic impairment	1	0.0	100.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0
	Other health impairment	48	2.1	14.6	50.0	31.3	2.1	50	22.0	22.0	52.0	4.0	0.0
	Specific learning disability	266	6.8	12.4	39.5	20.7	20.7	262	15.6	24.8	50.4	6.1	3.1
	Speech or language impairment	3	0.0	0.0	33.3	0.0	66.7	3	0.0	33.3	33.3	33.3	0.0
	Traumatic brain injury	3	0.0	33.3	66.7	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0
	Visual impairment	3	33.3	33.3	33.3	0.0	0.0	2	0.0	100.0	0.0	0.0	0.0

Subaraun	Statua	·		Listen	ing			_		Read	ing		
Subgroup	Status –	N	1	2	3	4	5	N	1	2	3	4	5
Total		2,203	8.7	10.7	35.9	21.4	23.3	2,171	20.0	25.2	39.4	9.0	6.4
	Female	1,040	8.0	11.3	35.1	22.8	22.9	1,017	20.3	25.0	40.0	9.5	5.2
Gender	Male	1,150	9.2	10.3	36.8	20.2	23.5	1,141	20.0	25.5	38.7	8.5	7.3
	Missing	13	15.4	0.0	23.1	23.1	38.5	13	7.7	15.4	46.2	15.4	15.4
	American Indian or Alaskan Native	5	0.0	0.0	40.0	40.0	20.0	4	0.0	25.0	75.0	0.0	0.0
	Asian	466	4.3	6.7	35.0	21.5	32.6	453	11.0	20.3	45.3	12.1	11.3
	Black or African American	510	7.3	13.5	38.4	22.0	18.8	510	23.7	29.0	35.3	8.0	3.9
Ethnicity	Hispanic or Latino	724	14.1	11.3	34.3	21.0	19.3	711	24.3	24.5	39.5	6.8	4.9
Lumony	Native Hawaiian or Other Pacific Islander	9	11.1	0.0	33.3	33.3	22.2	9	22.2	22.2	33.3	11.1	11.1
	Two or More Races	212	7.1	10.8	37.3	22.6	22.2	214	16.4	30.4	39.3	9.8	4.2
	White	274	5.8	11.3	35.8	19.7	27.4	267	20.2	24.0	36.7	10.9	8.2
	Other/Unknown	3	0.0	0.0	66.7	33.3	0.0	3	0.0	33.3	33.3	33.3	0.0
	Gifted	1	0.0	100.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0
Other	IEP	301	13.3	15.6	45.8	14.6	10.6	282	34.0	29.1	33.7	2.5	0.7
	Migrant	20	40.0	10.0	25.0	15.0	10.0	20	45.0	25.0	20.0	5.0	5.0
	Autism	11	36.4	0.0	36.4	18.2	9.1	10	30.0	30.0	40.0	0.0	0.0
	Developmental delay	2	0.0	50.0	50.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0
Primary Disability	Emotional disturbance	9	22.2	11.1	33.3	11.1	22.2	9	55.6	11.1	22.2	11.1	0.0
	Hearing Impaired	1	0.0	0.0	0.0	0.0	100.0	2	0.0	0.0	100.0	0.0	0.0
	Intellectual Disability	40	30.0	35.0	35.0	0.0	0.0	34	70.6	20.6	8.8	0.0	0.0
	Multiple disabilities	15	80.0	13.3	6.7	0.0	0.0	8	100.0	0.0	0.0	0.0	0.0

Table S2.13: Summative Performance Level by Domain - Grade 12

Cubanous	C tot			Listen	ing			_		Readi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Other health impairment	28	7.1	17.9	50.0	17.9	7.1	27	33.3	44.4	22.2	0.0	0.0
	Specific learning disability	193	4.7	12.4	51.3	18.1	13.5	187	24.6	30.5	40.6	3.2	1.1
	Traumatic brain injury	2	0.0	0.0	50.0	50.0	0.0	2	0.0	50.0	50.0	0.0	0.0

Qubarau	Statua	ĩ		Speak	ing	,				Writi	ng		
Subgroup	Status -	N	1	2	3	4	5	N	1	2	3	4	5
Total		2,147	6.1	12.9	33.9	19.2	27.8	2,163	16.3	22.1	45.5	9.8	6
	Female	1,012	5.3	14.0	32.1	19.8	28.8	1,016	15.9	21.8	45.6	9.8	6
Gender	Male	1,123	6.8	12.1	35.8	18.9	26.4	1,137	16.7	22.4	45.6	9.7	5
	Missing	12	16.7	0.0	8.3	0.0	75.0	10	10.0	10.0	30.0	20.0	30
	American Indian or Alaskan Native	4	0.0	0.0	75.0	0.0	25.0	5	0.0	20.0	80.0	0.0	(
	Asian	447	3.1	8.3	30.9	21.5	36.2	452	9.7	17.9	50.4	12.8	ę
	Black or African American	507	6.1	15.4	35.1	19.7	23.7	509	17.1	25.9	43.0	9.6	Z
Ethnicity	Hispanic or Latino	710	9.4	15.5	35.2	17.3	22.5	710	21.8	20.8	43.7	8.2	į
Lumony	Native Hawaiian or Other Pacific Islander	9	0.0	22.2	33.3	33.3	11.1	9	11.1	44.4	22.2	11.1	1
	Two or More Races	202	3.5	13.9	35.1	19.8	27.7	209	14.4	23.9	45.9	8.1	
	White	265	4.9	8.3	31.7	18.9	36.2	267	13.1	22.8	46.4	10.9	(
	Other/Unknown	3	0.0	33.3	33.3	0.0	33.3	2	50.0	0.0	50.0	0.0	
	Gifted	1	100.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	(
Other	IEP	278	8.6	16.5	42.8	14.7	17.3	280	24.3	26.1	41.8	6.8	
	Migrant	18	16.7	22.2	50.0	5.6	5.6	20	35.0	40.0	20.0	0.0	;
	Autism	9	22.2	11.1	33.3	33.3	0.0	9	22.2	11.1	44.4	22.2	(
	Developmental delay	1	0.0	100.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	(
Primary Disability	Emotional disturbance	8	12.5	25.0	37.5	12.5	12.5	8	37.5	25.0	37.5	0.0	
, <u>, , , , , , , , , , , , , , , , , , </u>	Hearing Impaired	1	0.0	0.0	0.0	0.0	100.0	2	0.0	0.0	50.0	50.0	
	Intellectual Disability	34	29.4	35.3	29.4	2.9	2.9	33	63.6	21.2	15.2	0.0	
	Multiple disabilities	5	80.0	20.0	0.0	0.0	0.0	7	85.7	14.3	0.0	0.0	(

Table S2.13: Summative Performance Level by Domain - Grade 12 (cont.)

Cubarous	Ctotus			Speak	ing					Writi	ng		
Subgroup	Status	N	1	2	3	4	5	N	1	2	3	4	5
	Other health impairment	28	10.7	17.9	53.6	10.7	7.1	25	24.0	32.0	40.0	4.0	0.0
	Specific learning disability	190	2.6	12.6	45.3	17.4	22.1	191	15.2	27.7	48.2	7.3	1.6
	Traumatic brain injury	3	0.0	0.0	33.3	33.3	33.3	2	0.0	0.0	50.0	50.0	0.0

Section 3: Summative Assessment - Percentage of Students by Overall Proficiency Level

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		10,123	14.2	77.3	8.6
	Female	4,821	11.9	79.1	8.9
Gender	Male	5,110	16.2	75.7	8.1
	Missing	192	15.6	71.4	13.0
	American Indian or Alaskan Native	19	15.8	78.9	5.3
	Asian	2,519	7.8	77.8	14.4
	Black or African American	1,904	12.1	80.3	7.6
	Hispanic or Latino	2,715	19.9	76.3	3.8
Ethnicity	Native Hawaiian or Other Pacific Islander	48	12.5	77.1	10.4
	Two or More Races	1,269	24.0	70.2	5.8
	White	1,618	9.4	80.0	10.6
	Other/Unknown	31	9.7	74.2	16.1
	Gifted	2	0.0	0.0	100.0
Other	IEP	516	34.7	62.0	3.3
	Migrant	18	22.2	66.7	11.1
	Autism	124	49.2	49.2	1.6
	Developmental delay	9	55.6	44.4	0.0
	Emotional disturbance	7	0.0	71.4	28.6
Primary Disability	Hearing Impaired	4	75.0	25.0	0.0
	Intellectual Disability	25	72.0	28.0	0.0
	Multiple disabilities	21	90.5	9.5	0.0
	Orthopedic impairment	10	20.0	80.0	0.0

Table S3.1: Summative Overall Proficiency Levels - Kindergarten

Subgroup	Status	N	Emerging	Progressing	Proficient
	Other health impairment	41	26.8	63.4	9.8
	Specific learning disability	35	31.4	68.6	0.0
	Speech or language impairment	226	18.1	77.9	4.0
	Traumatic brain injury	1	0.0	100.0	0.0
	Visual impairment	5	20.0	80.0	0.0

Subgroup	Status	Ν	Emerging	Progressing	Proficient
Total		8,802	9.3	71.0	19.7
	Female	4,170	8.1	69.8	22.1
Gender	Male	4,512	10.3	72.1	17.5
	Missing	120	11.7	70.0	18.3
	American Indian or Alaskan Native	29	13.8	65.5	20.7
	Asian	2,028	5.5	63.6	30.9
	Black or African American	1,610	9.4	72.3	18.3
	Hispanic or Latino	2,550	10.9	77.8	11.3
Ethnicity	Native Hawaiian or Other Pacific Islander	55	9.1	63.6	27.3
	Two or More Races	1,090	14.8	72.7	12.6
	White	1,410	7.2	67.0	25.9
	Other/Unknown	30	10.0	73.3	16.7
	Gifted	23	0.0	47.8	52.2
Other	IEP	612	27.5	66.3	6.2
	Migrant	22	27.3	59.1	13.6
	Autism	122	53.3	41.0	5.7
	Developmental delay	3	66.7	33.3	0.0
	Emotional disturbance	14	14.3	78.6	7.1
Primary Disability	Hearing Impaired	9	44.4	55.6	0.0
	Intellectual Disability	33	45.5	54.5	0.0
	Multiple disabilities	27	81.5	18.5	0.0
	Orthopedic impairment	13	23.1	53.8	23.1

Table S3.2: Summative Overall Proficiency Levels - Grade 1

Subgroup	Status	N	Emerging	Progressing	Proficient
	Other health impairment	68	23.5	70.6	5.9
	Specific learning disability	86	19.8	77.9	2.3
	Speech or language impairment	229	8.7	82.1	9.2
	Traumatic brain injury	1	0.0	100.0	0.0
	Visual impairment	2	0.0	100.0	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		7,322	10.0	63.8	26.1
	Female	3,346	8.4	61.4	30.2
Gender	Male	3,881	11.5	66.0	22.5
	Missing	95	8.4	62.1	29.5
	American Indian or Alaskan Native	17	17.6	64.7	17.6
	Asian	1,477	6.9	58.0	35.1
	Black or African American	1,415	7.9	66.2	25.9
	Hispanic or Latino	2,269	12.1	67.4	20.5
Ethnicity	Native Hawaiian or Other Pacific Islander	45	6.7	68.9	24.4
	Two or More Races	957	16.4	64.1	19.5
	White	1,120	7.1	61.1	31.8
	Other/Unknown	22	18.2	54.5	27.3
	Gifted	37	0.0	37.8	62.2
Other	Home Schooled	1	100.0	0.0	0.0
Other	IEP	614	26.2	68.1	5.7
	Migrant	20	20.0	50.0	30.0
	Autism	99	45.5	49.5	5.1
	Developmental delay	4	75.0	25.0	0.0
	Emotional disturbance	9	11.1	88.9	0.0
Primary Disability	Hearing Impaired	9	44.4	55.6	0.0
	Intellectual Disability	40	52.5	47.5	0.0
	Multiple disabilities	35	88.6	11.4	0.0

Table S3.3: Summative Overall Proficiency Levels - Grade 2

Subgroup	Status	N	Emerging	Progressing	Proficient
	Orthopedic impairment	5	20.0	60.0	20.0
	Other health impairment	77	18.2	76.6	5.2
	Specific learning disability	187	14.4	82.9	2.7
	Speech or language impairment	145	10.3	76.6	13.1
	Traumatic brain injury	2	0.0	50.0	50.0
	Visual impairment	2	0.0	100.0	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		5,853	10.4	70.6	19.0
	Female	2,602	9.5	68.6	21.9
Gender	Male	3,225	10.9	72.3	16.8
	Missing	26	19.2	69.2	11.5
	American Indian or Alaskan Native	11	27.3	54.5	18.2
	Asian	998	8.3	65.2	26.5
	Black or African American	1,207	8.2	75.0	16.8
	Hispanic or Latino	1,897	12.2	72.2	15.6
Ethnicity	Native Hawaiian or Other Pacific Islander	50	2.0	72.0	26.0
	Two or More Races	886	14.6	71.2	14.2
	White	796	7.4	66.5	26.1
	Other/Unknown	8	12.5	75.0	12.5
	Gifted	30	0.0	56.7	43.3
Other	IEP	808	17.9	76.9	5.2
	Migrant	30	23.3	56.7	20.0
	Autism	91	46.2	51.6	2.2
	Developmental delay	6	50.0	50.0	0.0
	Emotional disturbance	18	11.1	83.3	5.6
Primary Disability	Hearing Impaired	9	22.2	55.6	22.2
	Intellectual Disability	42	33.3	66.7	0.0
	Multiple disabilities	34	88.2	11.8	0.0
	Orthopedic impairment	6	16.7	16.7	66.7

Table S3.4: Summative Overall Proficiency Levels - Grade 3

Subgroup	Status	N	Emerging	Progressing	Proficient
	Other health impairment	111	11.7	82.0	6.3
	Specific learning disability	402	10.0	86.6	3.5
	Speech or language impairment	95	1.1	85.3	13.7
	Traumatic brain injury	2	50.0	0.0	50.0
	Visual impairment	1	0.0	100.0	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		4,419	12.9	63.6	23.6
	Female	1,943	11.2	62.7	26.0
Gender	Male	2,422	14.0	64.3	21.7
	Missing	54	22.2	61.1	16.7
	American Indian or Alaskan Native	9	11.1	55.6	33.3
	Asian	658	8.7	55.8	35.6
	Black or African American	848	9.8	69.3	20.9
	Hispanic or Latino	1,565	14.9	63.7	21.4
Ethnicity	Native Hawaiian or Other Pacific Islander	30	10.0	66.7	23.3
	Two or More Races	686	18.1	62.8	19.1
	White	615	10.7	64.6	24.7
	Other/Unknown	8	12.5	62.5	25.0
	Gifted	21	0.0	61.9	38.1
Other	IEP	826	17.3	74.7	8.0
	Migrant	19	10.5	68.4	21.1
	Autism	87	47.1	49.4	3.4
	Deaf-blindness	1	100.0	0.0	0.0
	Developmental delay	7	71.4	28.6	0.0
Primary Disability	Emotional disturbance	11	0.0	90.9	9.1
	Hearing Impaired	8	12.5	75.0	12.5
	Intellectual Disability	51	56.9	43.1	0.0
	Multiple disabilities	23	91.3	8.7	0.0

Table S3.5: Summative Overall Proficiency Levels - Grade 4

Subgroup	Status	N	Emerging	Progressing	Proficient
	Orthopedic impairment	5	20.0	80.0	0.0
	Other health impairment	102	10.8	81.4	7.8
	Specific learning disability	472	6.8	84.1	9.1
	Speech or language impairment	53	0.0	83.0	17.0
	Traumatic brain injury	3	66.7	33.3	0.0
	Visual impairment	3	0.0	100.0	0.0

Subgroup	Status	Ν	Emerging	Progressing	Proficient
Total		3,994	16.4	65.8	17.8
	Female	1,806	15.6	64.5	19.9
Gender	Male	2,136	17.0	66.9	16.1
	Missing	52	21.2	65.4	13.5
	American Indian or Alaskan Native	10	30.0	60.0	10.0
	Asian	588	12.9	65.6	21.4
	Black or African American	778	17.5	66.3	16.2
	Hispanic or Latino	1,445	17.9	65.2	17.0
Ethnicity	Native Hawaiian or Other Pacific Islander	31	16.1	74.2	9.7
	Two or More Races	630	16.7	69.2	14.1
	White	504	14.5	61.9	23.6
	Other/Unknown	8	0.0	87.5	12.5
	Gifted	13	7.7	53.8	38.5
Other	IEP	825	20.0	73.0	7.0
	Migrant	17	29.4	41.2	29.4
	Autism	57	52.6	42.1	5.3
	Developmental delay	6	50.0	50.0	0.0
	Emotional disturbance	16	18.8	68.8	12.5
Primary Disability	Hearing Impaired	9	55.6	22.2	22.2
	Intellectual Disability	65	52.3	47.7	0.0
	Multiple disabilities	38	92.1	5.3	2.6
	Orthopedic impairment	6	16.7	83.3	0.0

Table S3.6: Summative Overall Proficiency Levels - Grade 5

Subgroup	Status	N	Emerging	Progressing	Proficient
	Other health impairment	103	16.5	73.8	9.7
	Specific learning disability	486	7.2	85.8	7.0
	Speech or language impairment	29	3.4	79.3	17.2
	Traumatic brain injury	6	66.7	33.3	0.0
	Visual impairment	4	25.0	75.0	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		3,365	13.8	69.7	16.4
	Female	1,458	12.7	71.2	16.1
Gender	Male	1,877	14.7	68.4	16.9
	Missing	30	16.7	83.3	0.0
	American Indian or Alaskan Native	8	0.0	87.5	12.5
	Asian	474	9.5	67.1	23.4
	Black or African American	686	12.8	72.3	14.9
	Hispanic or Latino	1,175	17.3	68.1	14.6
Ethnicity	Native Hawaiian or Other Pacific Islander	23	8.7	82.6	8.7
	Two or More Races	537	15.5	71.7	12.8
	White	455	9.5	69.9	20.7
	Other/Unknown	7	28.6	42.9	28.6
Gender Ethnicity Other Primary Disability	Gifted	8	0.0	62.5	37.5
Othor	Home Schooled	1	0.0	100.0	0.0
Other	IEP	701	16.0	78.7	5.3
	Migrant	3,365 13.8 69.7 1,458 12.7 71.2 1,877 14.7 68.4 30 16.7 83.3 tive 8 0.0 87.5 474 9.5 67.1 686 12.8 72.3 1,175 17.3 68.1 fic 23 8.7 82.6 537 15.5 71.7 455 9.5 69.9 7 28.6 42.9 8 0.0 62.5 1 0.0 100.0	11.8		
	Autism	49	57.1	36.7	6.1
	Developmental delay	4	50.0	25.0	25.0
Primany Disability	Emotional disturbance	18	5.6	88.9	5.6
	Hearing Impaired	6	16.7	66.7	16.7
	Intellectual Disability	64	37.5	59.4	3.1
	Multiple disabilities	28	89.3	10.7	0.0

Table S3.7: Summative Overall Proficiency Levels - Grade 6

Subgroup	Status	N	Emerging	Progressing	Proficient
	Other health impairment	80	11.3	85.0	3.8
	Specific learning disability	433	4.4	89.8	5.8
	Speech or language impairment	14	7.1	85.7	7.1
	Traumatic brain injury	5	40.0	60.0	0.0
	Visual impairment	2	0.0	100.0	0.0

Subgroup	Status	Ν	Emerging	Progressing	Proficient
Total		3,253	21.1	70.2	8.7
	Female	1,445	20.4	69.6	10.0
Gender	Male	1,790	21.5	70.9	7.7
	Missing	18	33.3	61.1	5.6
	American Indian or Alaskan Native	5	40.0	60.0	0.0
	Asian	439	13.9	73.6	12.5
	Black or African American	703	18.3	72.5	9.1
	Hispanic or Latino	1,153	24.0	68.8	7.2
Ethnicity	Native Hawaiian or Other Pacific Islander	31	9.7	80.6	9.7
	Two or More Races	527	29.0	65.5	5.5
	White	393	15.0	72.5	12.5
	Other/Unknown	2	50.0	50.0	0.0
	Gifted	9	11.1	55.6	33.3
Other	IEP	644	20.7	76.4	3.0
	Migrant	11	27.3	45.5	27.3
	Autism	25	44.0	52.0	4.0
	Developmental delay	5	100.0	0.0	0.0
	Emotional disturbance	8	37.5	62.5	0.0
Primary Disability	Hearing Impaired	8	50.0	37.5	12.5
	Intellectual Disability	53	49.1	50.9	0.0
	Multiple disabilities	22	95.5	4.5	0.0
	Orthopedic impairment	4	25.0	75.0	0.0

Table S3.8: Summative Overall Proficiency Levels - Grade 7

Subgroup	Status	N	Emerging	Progressing	Proficient
	Other health impairment	103	16.5	81.6	1.9
	Specific learning disability	389	9.5	86.6	3.9
	Speech or language impairment	13	15.4	84.6	0.0
	Traumatic brain injury	9	33.3	66.7	0.0
	Visual impairment	3	66.7	33.3	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		3,382	20.5	69.4	10.1
	Female	1,434	20.2	68.8	11.0
Gender	Male	1,915	20.8	69.7	9.5
	Missing	33	18.2	75.8	6.1
	American Indian or Alaskan Native	6	16.7	83.3	0.0
	Asian	499	13.8	72.5	13.6
	Black or African American	671	19.2	70.3	10.4
	Hispanic or Latino	1,205	23.2	68.2	8.5
Ethnicity	Native Hawaiian or Other Pacific Islander	25	12.0	80.0	8.0
	Two or More Races	561	27.1	62.4	10.5
	White	409	14.2	76.5	9.3
	Other/Unknown	6	33.3	50.0	16.7
	Gifted	7	0.0	85.7	14.3
Other	IEP	609	20.5	75.2	4.3
	Migrant	16	31.3	68.8	0.0
	Autism	33	45.5	51.5	3.0
	Developmental delay	7	85.7	14.3	0.0
	Emotional disturbance	14	21.4	78.6	0.0
Primary Disability	Hearing Impaired	6	66.7	33.3	0.0
	Intellectual Disability	57	54.4	43.9	1.8
	Multiple disabilities	27	88.9	11.1	0.0
	Orthopedic impairment	4	0.0	100.0	0.0

Table S3.9: Summative Overall Proficiency Levels - Grade 8

Subgroup	Status	N	Emerging	Progressing	Proficient
	Other health impairment	74	13.5	79.7	6.8
	Specific learning disability	378	8.7	86.2	5.0
	Speech or language impairment	5	0.0	100.0	0.0
	Traumatic brain injury	1	0.0	100.0	0.0
	Visual impairment	2	50.0	50.0	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		4,293	31.6	64.3	4.1
	Female	1,811	30.6	65.0	4.4
Gender	Male	2,447	32.3	63.9	3.8
	Missing	35	37.1	51.4	11.4
	American Indian or Alaskan Native	4	0.0	100.0	0.0
	Asian	570	15.1	76.3	8.6
	Black or African American	1,037	29.1	67.1	3.8
	Hispanic or Latino	1,365	37.1	60.3	2.6
Ethnicity	Native Hawaiian or Other Pacific Islander	21	19.0	81.0	0.0
	Two or More Races	835	43.4	54.0	2.6
	White	447	21.3	72.5	6.3
	Other/Unknown	14	21.4	71.4	7.1
	Gifted	7	14.3	85.7	0.0
Other	IEP	612	28.1	70.6	1.3
	Migrant	14	35.7	50.0	14.3
	Autism	27	48.1	51.9	0.0
	Deaf-blindness	3	66.7	33.3	0.0
	Developmental delay	9	66.7	33.3	0.0
Primary Disability	Emotional disturbance	8	50.0	50.0	0.0
	Hearing Impaired	15	46.7	53.3	0.0
	Intellectual Disability	51	54.9	45.1	0.0
	Multiple disabilities	21	85.7	14.3	0.0

 Table S3.10: Summative Overall Proficiency Levels - Grade 9

Subgroup	Status	N	Emerging	Progressing	Proficient
	Orthopedic impairment	4	50.0	50.0	0.0
	Other health impairment	94	19.1	76.6	4.3
	Specific learning disability	368	17.9	81.0	1.1
	Speech or language impairment	9	11.1	88.9	0.0
	Traumatic brain injury	4	50.0	50.0	0.0
	Visual impairment	3	66.7	33.3	0.0

Subgroup	Status	Ν	Emerging	Progressing	Proficient
Total		3,674	24.4	68.6	7.0
	Female	1,591	23.0	69.0	8.0
Gender	Male	2,066	25.5	68.2	6.3
	Missing	17	17.6	82.4	0.0
	American Indian or Alaskan Native	11	36.4	63.6	0.0
	Asian	569	12.7	77.0	10.4
	Black or African American	852	21.8	71.6	6.6
	Hispanic or Latino	1,231	32.1	63.1	4.8
Ethnicity	Native Hawaiian or Other Pacific Islander	23	21.7	65.2	13.0
	Two or More Races	586	25.9	67.4	6.7
	White	395	20.0	69.1	10.9
	Other/Unknown	7	28.6	71.4	0.0
	Gifted	5	0.0	60.0	40.0
Other	IEP	525	24.6	73.1	2.3
	Migrant	19	36.8	63.2	0.0
	Autism	31	48.4	24.4 68.6 23.0 69.0 25.5 68.2 17.6 82.4 36.4 63.6 12.7 77.0 21.8 71.6 32.1 63.1 25.9 67.4 20.0 69.1 28.6 71.4 0.0 60.0 24.6 73.1 36.8 63.2	3.2
	Developmental delay	7	42.9	57.1	0.0
	Emotional disturbance	9	0.0	100.0	0.0
Primary Disability	Hearing Impaired	6	50.0	50.0	0.0
	Intellectual Disability	42	54.8	45.2	0.0
	Multiple disabilities	23	91.3	8.7	0.0
	Orthopedic impairment	2	100.0	0.0	0.0

Table S3.11: Summative Overall Proficiency Levels - Grade 10

Subgroup	Status	N	Emerging	Progressing	Proficient
	Other health impairment	62	29.0	71.0	0.0
	Specific learning disability	318	11.9	84.9	3.1
	Speech or language impairment	8	0.0	100.0	0.0
	Traumatic brain injury	5	60.0	40.0	0.0
	Visual impairment	5	40.0	40.0	20.0

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		2,997	16.9	74.4	8.7
	Female	1,353	17.5	74.3	8.2
Gender	Male	1,619	16.5	74.4	9.1
	Missing	25	12.0	84.0	4.0
	American Indian or Alaskan Native	3	0.0	100.0	0.0
	Asian	545	10.1	77.6	12.3
	Black or African American	792	17.9	75.6	6.4
	Hispanic or Latino	912	22.3	71.1	6.7
Ethnicity	Native Hawaiian or Other Pacific Islander	16	12.5	87.5	0.0
	Two or More Races	353	14.7	75.4	9.9
	White	369	13.8	73.7	12.5
	Other/Unknown	7	28.6	71.4	0.0
	Gifted	3	0.0	66.7	33.3
Other	IEP	446	26.0	71.3	2.7
	Migrant	33	45.5	48.5	6.1
	Autism	14	57.1	42.9	0.0
	Developmental delay	9	77.8	22.2	0.0
	Emotional disturbance	14	14.3	85.7	0.0
Primary Disability	Hearing Impaired	6	66.7	33.3	0.0
	Intellectual Disability	45	57.8	42.2	0.0
	Multiple disabilities	22	95.5	4.5	0.0
	Orthopedic impairment	1	100.0	0.0	0.0

 Table S3.12: Summative Overall Proficiency Levels - Grade 11

Subgroup	Status	N	N Emerging		Proficient	
	Other health impairment	52	11.5	86.5	1.9	
	Specific learning disability	274	14.6	81.8	3.6	
	Speech or language impairment	3	0.0	66.7	33.3	
	Traumatic brain injury	3	33.3	66.7	0.0	
	Visual impairment	4	50.0	50.0	0.0	

Subgroup	Status	N	Emerging	Progressing	Proficient
Total		2,247	14.1	76.0	9.9
	Female	1,057	14.3	76.0	9.7
Gender	Male	1,176	13.9	76.3	9.9
	Missing	14	14.3	57.1	28.6
	American Indian or Alaskan Native	5	0.0	100.0	0.0
	Asian	473	8.7	75.7	15.6
	Black or African American	526	14.6	77.8	7.6
	Hispanic or Latino	735	19.0	73.7	7.2
Ethnicity	Native Hawaiian or Other Pacific Islander	9	0.0	77.8	22.2
	Two or More Races	216	13.4	75.9	10.6
	White	280	10.4	78.6	11.1
	Other/Unknown	3	0.0	100.0	0.0
	Gifted	1	100.0	0.0	0.0
Other	IEP	309	22.7	75.7	1.6
	Migrant	20	30.0	65.0	5.0
	Autism	11	36.4	63.6	0.0
	Developmental delay	2	50.0	50.0	0.0
	Emotional disturbance	9	22.2	77.8	0.0
Primary Disability	Hearing Impaired	2	0.0	100.0	0.0
	Intellectual Disability	41	53.7	46.3	0.0
	Multiple disabilities	16	93.8	6.3	0.0
	Other health impairment	29	20.7	79.3	0.0

Table S3.13: Summative Overall Proficiency Levels - Grade 12

Subgroup	Status	N	Emerging	Progressing	Proficient
	Specific learning disability	197	10.7	86.8	2.5
	Traumatic brain injury	3	0.0	100.0	0.0

Section 4: Summative Assessment - Marginal Reliability

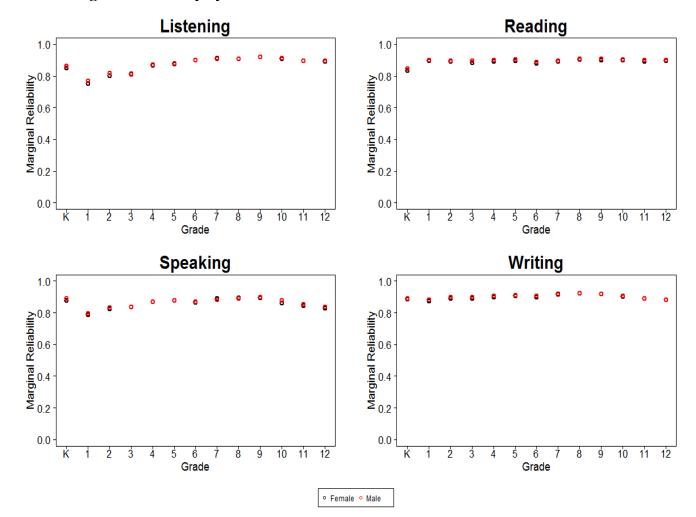
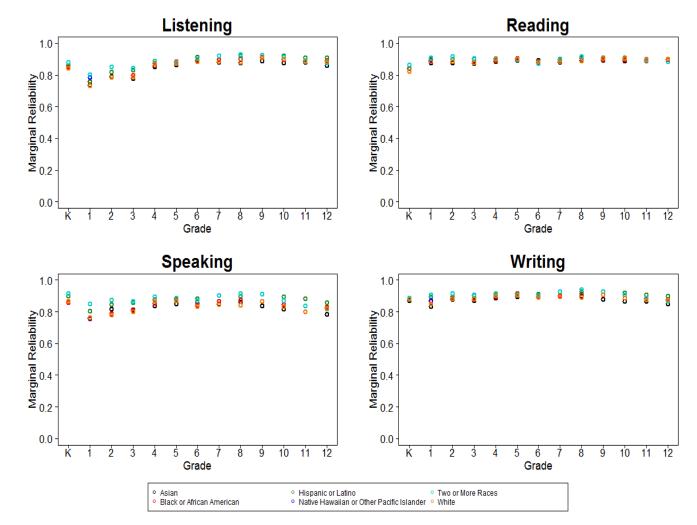


Figure S4.1: Summative Marginal Reliability by Gender





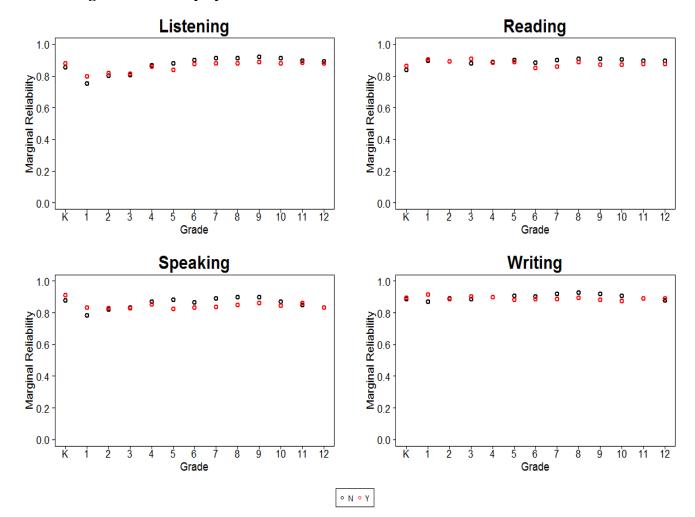


Figure S4.3: Summative Marginal Reliability by IEP

* Domains with Exemption or Not Attempted are excluded.

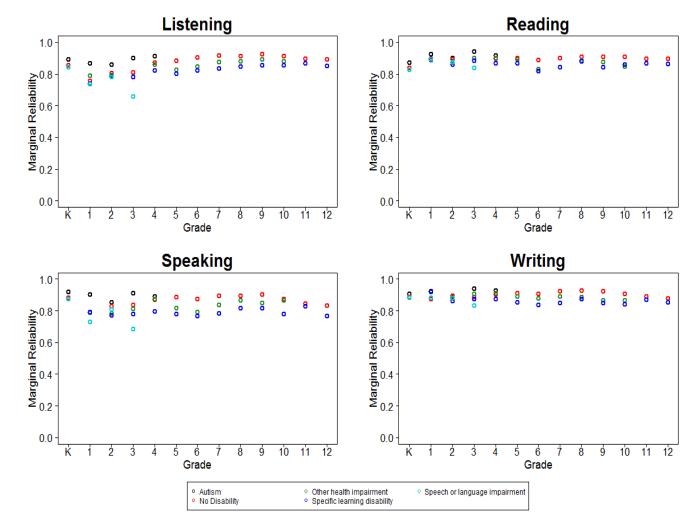


Figure S4.4: Summative Marginal Reliability by Primary Disability

Section 5: Summative Assessment - Conditional Standard Error of Measurement (CSEM)

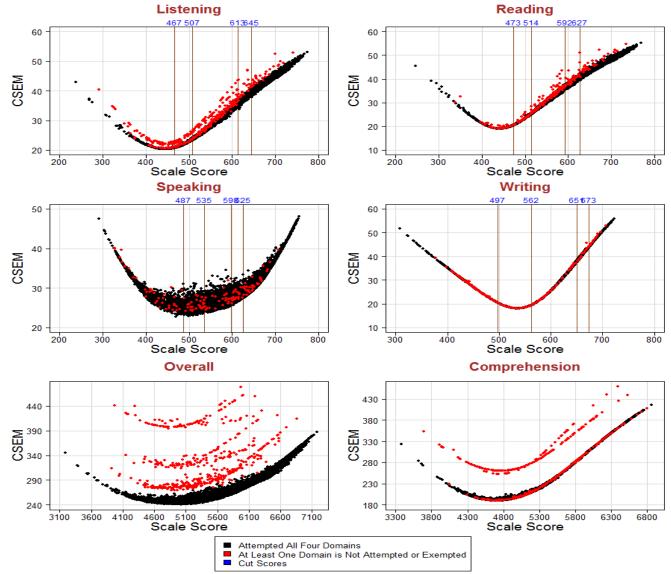


Figure S5.1: Summative Conditional Standard Error of Measurement for Kindergarten

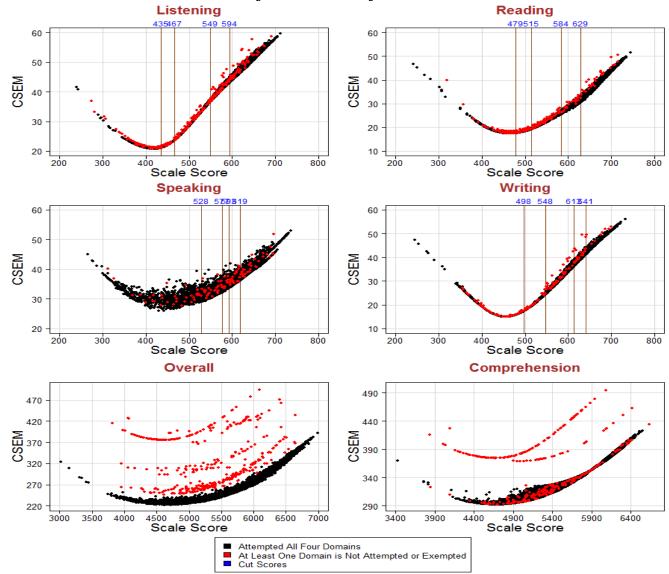


Figure S5.2: Summative Conditional Standard Error of Measurement for Grade 1

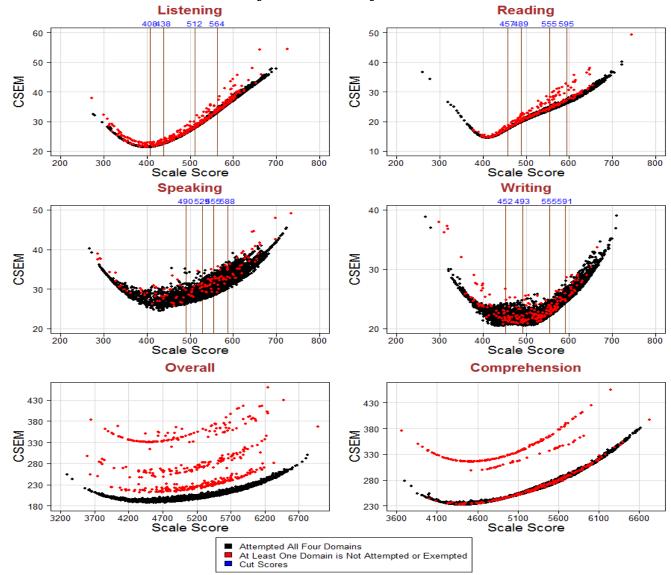


Figure S5.3: Summative Conditional Standard Error of Measurement for Grade 2

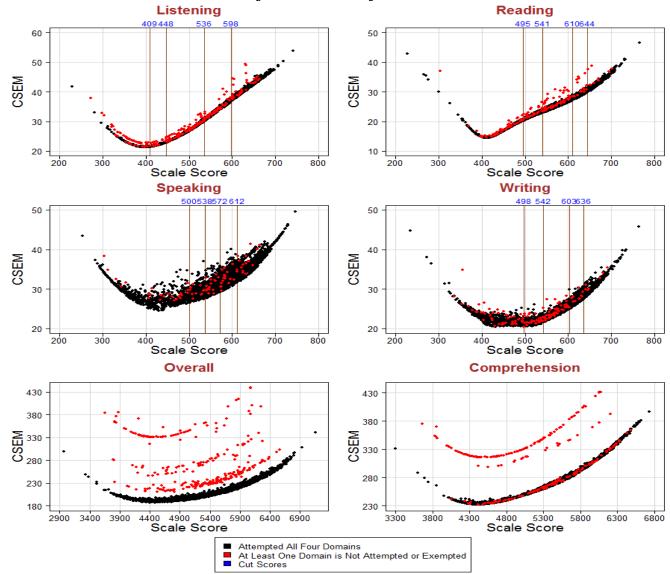


Figure S5.4: Summative Conditional Standard Error of Measurement for Grade 3

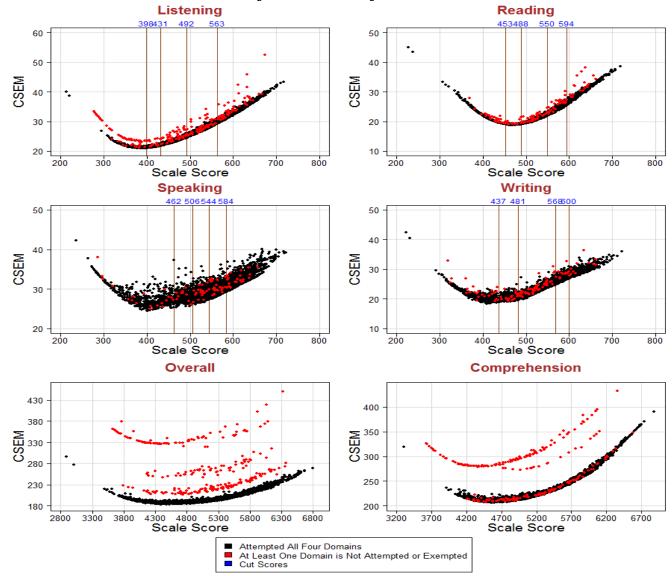


Figure S5.5: Summative Conditional Standard Error of Measurement for Grade 4

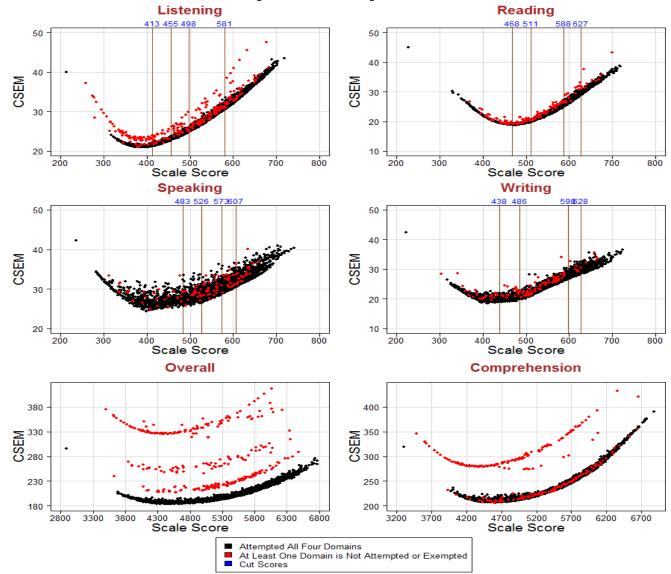


Figure S5.6: Summative Conditional Standard Error of Measurement for Grade 5

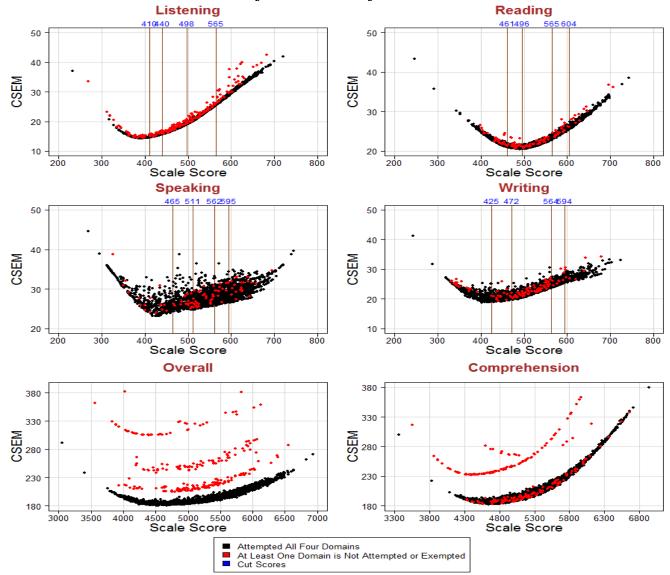


Figure S5.7: Summative Conditional Standard Error of Measurement for Grade 6

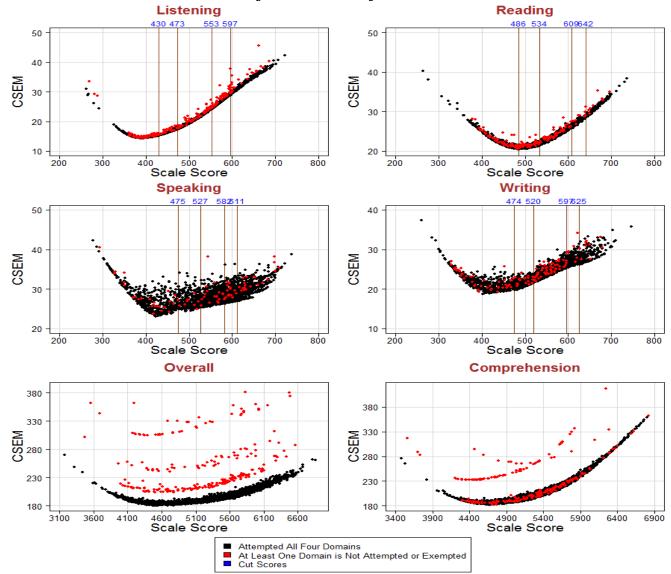


Figure S5.8: Summative Conditional Standard Error of Measurement for Grade 7

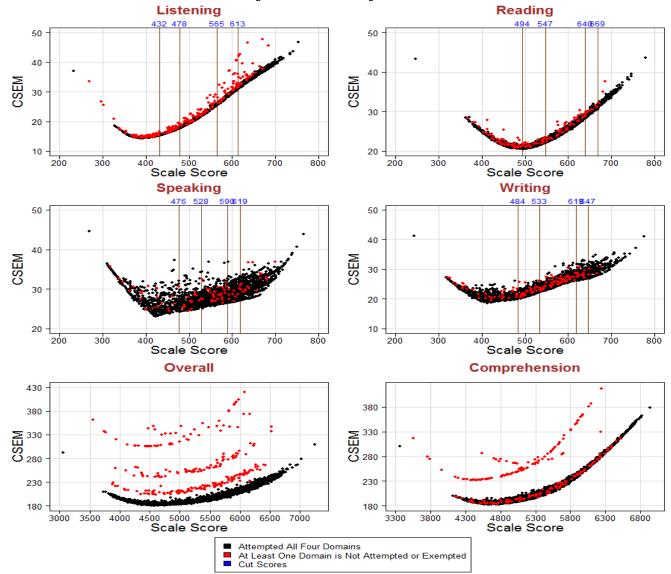


Figure S5.9: Summative Conditional Standard Error of Measurement for Grade 8

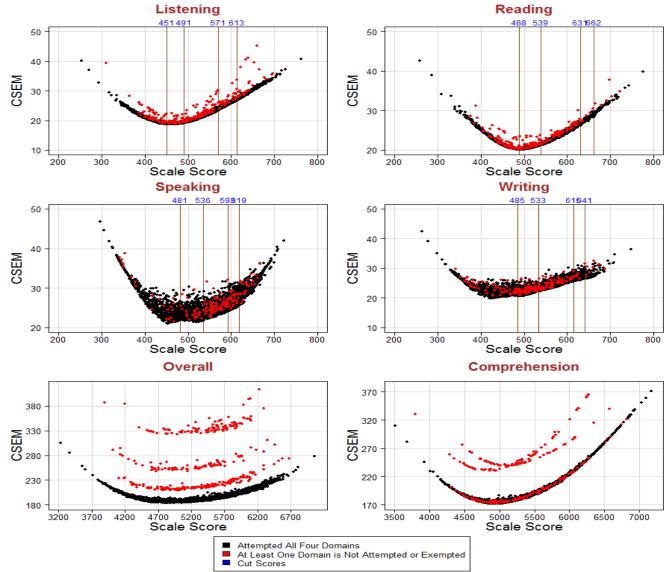


Figure S5.10: Summative Conditional Standard Error of Measurement for Grade 9

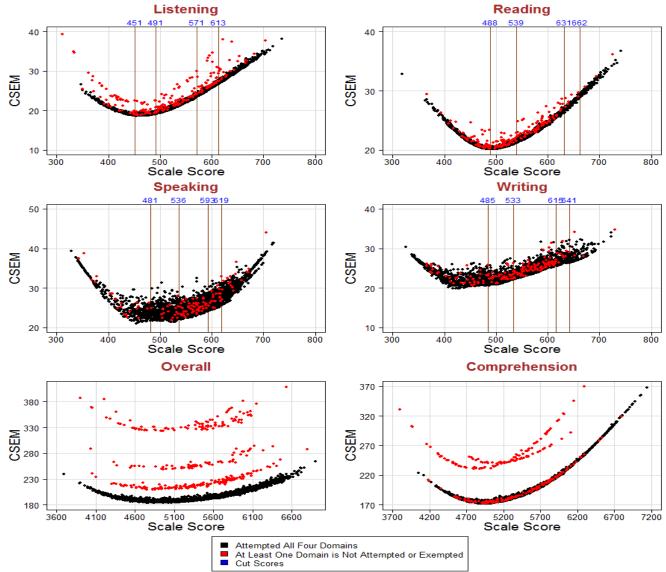


Figure S5.11: Summative Conditional Standard Error of Measurement for Grade 10

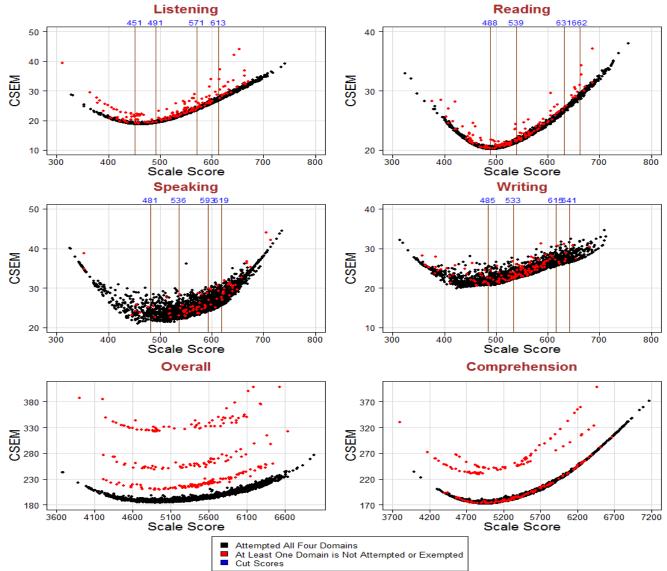


Figure S5.12: Summative Conditional Standard Error of Measurement for Grade 11

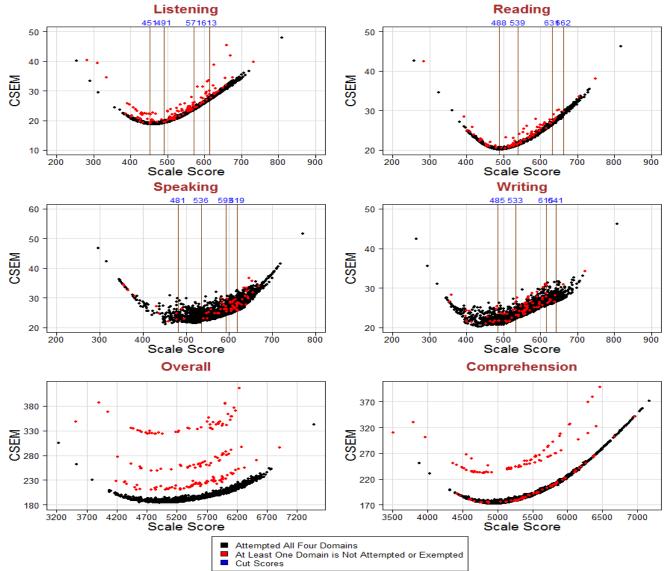


Figure S5.13: Summative Conditional Standard Error of Measurement for Grade 12

Section 6: Summative Assessment - Inter-Rater Analysis

	Item ID	Score Points	Number FR	Number SR	Percent SR	Weighted Kappa	N			Percent		
Domain							Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement
Speaking	4192	2	9,670	1,914	19.8	.8610	1,819	1,898	16	95.0	99.2	0.8
	4194	2	9,654	1,908	19.8	.8050	1,740	1,891	17	91.2	99.1	0.9
	4196	2	9,642	1,906	19.8	.8407	1,762	1,885	21	92.4	98.9	1.1
	4198	2	9,595	1,878	19.6	.7875	1,496	1,872	6	79.7	99.7	0.3
	4200	2	9,620	1,901	19.8	.7846	1,727	1,863	38	90.8	98.0	2.0
	4202	2	9,529	1,857	19.5	.7957	1,479	1,811	46	79.6	97.5	2.5
	4236	3	9,696	1,900	19.6	.8149	1,333	1,884	16	70.2	99.2	0.8
	4310	3	9,696	1,914	19.7	.8202	1,371	1,897	17	71.6	99.1	0.9
	4330	3	9,697	1,922	19.8	.8183	1,363	1,901	21	70.9	98.9	1.1
	4338	3	9,696	1,920	19.8	.8099	1,368	1,895	25	71.3	98.7	1.3
	4394	3	9,697	1,894	19.5	.8630	1,396	1,877	17	73.7	99.1	0.9

Table S6.1: Summative Inter-Rater Result - Kindergarten

* FR: First rater; SR: Second rater.

		Cooro	Number	Number	Percent	Weighted		Ν			Percent	
Domain Speaking	Item ID	Score Points	Number FR	Number SR	SR	Weighted Kappa	Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement
	598	2	8,452	1,679	19.9	.8175	1,523	1,664	15	90.7	99.1	0.9
	600	2	8,444	1,681	19.9	.6604	1,467	1,674	7	87.3	99.6	0.4
	602	2	8,444	1,681	19.9	.8722	1,610	1,677	4	95.8	99.8	0.2
	604	2	8,437	1,678	19.9	.8134	1,520	1,662	16	90.6	99.0	1.0
Speaking	606	2	8,420	1,671	19.8	.6362	1,375	1,640	31	82.3	98.1	1.9
	634	3	8,470	1,683	19.9	.6593	1,217	1,644	39	72.3	97.7	2.3
	700	3	8,440	1,678	19.9	.9133	1,462	1,674	4	87.1	99.8	0.2
	682	4	8,467	1,682	19.9	.6803	1,074	1,628	54	63.9	96.8	3.2
	660	5	8,407	1,666	19.8	.8370	939	1,597	69	56.4	95.9	4.1

Table S6.2: Summative Inter-Rater Result - Grade 1

		Saara	Number	Number	Dereent	Weighted		Ν			Percent	
Domain	Item ID	Score Points	Number FR	Number SR	Percent SR	Карра	Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement
	1348	2	12,510	2,489	19.9	.7882	2,242	2,473	16	90.1	99.4	0.6
	1350	2	12,465	2,477	19.9	.8236	2,231	2,456	21	90.1	99.2	0.8
	1352	2	12,505	2,489	19.9	.7922	2,164	2,483	6	86.9	99.8	0.2
	1354	2	12,501	2,490	19.9	.6894	2,171	2,481	9	87.2	99.6	0.4
Speaking	1356	2	12,486	2,486	19.9	.7980	2,334	2,467	19	93.9	99.2	0.8
	1394	3	12,483	2,480	19.9	.8178	1,780	2,458	22	71.8	99.1	0.9
	1406	3	12,559	2,493	19.9	.8472	2,048	2,461	32	82.2	98.7	1.3
	1448	4	12,497	2,484	19.9	.8623	1,805	2,365	119	72.7	95.2	4.8
	1440	5	12,466	2,473	19.8	.8410	1,577	2,398	75	63.8	97.0	3.0
	1496	3	12,546	2,281	18.2	.8280	1,683	2,256	25	73.8	98.9	1.1
Writing	1512	3	12,561	2,179	17.3	.8634	1,729	2,163	16	79.3	99.3	0.7
Writing	1464	4	12,481	2,471	19.8	.8620	1,808	2,430	41	73.2	98.3	1.7
	1586	4	12,508	2,474	19.8	.8261	1,711	2,464	10	69.2	99.6	0.4

Table S6.3: Summative Inter-Rater Result - Grade Band 2-3

		Seere	Number	Number	Percent	Weighted		Ν		Percent			
Domain	Item ID	Score Points	Number FR	Number SR	SR	Карра	Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement	
	2116	3	7,960	1,579	19.8	.7552	1,135	1,547	32	71.9	98.0	2.0	
	2150	3	8,021	1,597	19.9	.6788	1,083	1,582	15	67.8	99.1	0.9	
	2184	3	7,970	1,586	19.9	.9353	1,466	1,581	5	92.4	99.7	0.3	
Speaking	2186	3	7,943	1,576	19.8	.8375	1,231	1,553	23	78.1	98.5	1.5	
Speaking	2188	3	7,945	1,577	19.8	.7630	1,152	1,549	28	73.1	98.2	1.8	
	2098	5	7,951	1,579	19.9	.8563	1,097	1,506	73	69.5	95.4	4.6	
	2100	5	7,959	1,581	19.9	.7679	907	1,524	57	57.4	96.4	3.6	
	2206	5	7,948	1,575	19.8	.7968	852	1,521	54	54.1	96.6	3.4	
	2350	3	7,961	1,545	19.4	.8472	1,223	1,522	23	79.2	98.5	1.5	
	2352	3	7,953	1,542	19.4	.8518	1,214	1,521	21	78.7	98.6	1.4	
Writing	2354	3	7,956	1,555	19.5	.8618	1,195	1,540	15	76.8	99.0	1.0	
	2344	4	7,953	1,586	19.9	.8127	1,007	1,529	57	63.5	96.4	3.6	
	2306	5	7,930	1,567	19.8	.8440	994	1,524	43	63.4	97.3	2.7	

Table S6.4: Summative Inter-Rater Result - Grade Band 4-5

		Saara	Number	Number	Percent	Weighted		N		Percent			
Domain	Item ID	Score Points	FR	Number SR	SR	Карра	Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement	
	2672	3	9,429	1,864	19.8	.7800	1,396	1,856	8	74.9	99.6	0.4	
	2676	3	9,399	1,855	19.7	.8194	1,522	1,814	41	82.0	97.8	2.2	
	2678	3	9,354	1,839	19.7	.8024	1,518	1,818	21	82.5	98.9	1.1	
Speaking	2680	3	9,383	1,849	19.7	.8506	1,551	1,828	21	83.9	98.9	1.1	
	2654	5	9,347	1,831	19.6	.8755	1,205	1,763	68	65.8	96.3	3.7	
	2656	5	9,348	1,840	19.7	.8642	1,273	1,784	56	69.2	97.0	3.0	
	2706	5	9,394	1,849	19.7	.9002	1,299	1,806	43	70.3	97.7	2.3	
	2778	3	9,505	1,874	19.7	.8401	1,354	1,861	13	72.3	99.3	0.7	
	2806	3	9,534	1,826	19.2	.8740	1,464	1,812	14	80.2	99.2	0.8	
Writing	2808	3	9,522	1,819	19.1	.8594	1,425	1,810	9	78.3	99.5	0.5	
winning	2810	3	9,532	1,850	19.4	.8556	1,441	1,834	16	77.9	99.1	0.9	
	2752	5	9,504	1,874	19.7	.8596	1,169	1,837	37	62.4	98.0	2.0	
	2796	5	9,517	1,869	19.6	.8645	1,310	1,856	13	70.1	99.3	0.7	

Table S6.5: Summative Inter-Rater Result - Grade Band 6-8

Domain		Seere	Number	Number	Dereent	Waightad		Ν			Percent	
Domain	Item ID	Score Points	FR	SR	Percent SR	Weighted Kappa	Exact Agreement	within 1 Agreement	Not within 1 Agreement	Exact Agreement	within 1 Agreement	Not within 1 Agreement
	3374	3	12,445	2,441	19.6	.7486	1,737	2,421	20	71.2	99.2	0.8
	3382	3	12,394	2,441	19.7	.8182	1,953	2,393	48	80.0	98.0	2.0
	3384	3	12,322	2,423	19.7	.7981	1,912	2,383	40	78.9	98.3	1.7
Speaking	3386	3	12,346	2,422	19.6	.7466	1,738	2,399	23	71.8	99.1	0.9
	3352	5	12,378	2,438	19.7	.8624	1,795	2,316	122	73.6	95.0	5.0
	3354	5	12,286	2,414	19.6	.8935	1,551	2,308	106	64.3	95.6	4.4
	3406	5	12,348	2,418	19.6	.8479	1,435	2,321	97	59.3	96.0	4.0
	3490	3	12,416	2,431	19.6	.7679	1,519	2,403	28	62.5	98.8	1.2
	3516	3	12,513	2,364	18.9	.8223	1,811	2,326	38	76.6	98.4	1.6
Writing	3518	3	12,490	2,355	18.9	.8290	1,792	2,335	20	76.1	99.2	0.8
winning	3520	3	12,503	2,379	19.0	.8390	1,824	2,352	27	76.7	98.9	1.1
	3456	5	12,411	2,430	19.6	.8374	1,554	2,398	32	64.0	98.7	1.3
	3494	5	12,401	2,417	19.5	.8698	1,561	2,388	29	64.6	98.8	1.2

Table S6.6: Summative Inter-Rater Result - Grade Band 9-12

Section 7: Summative Assessment - Dimensionality

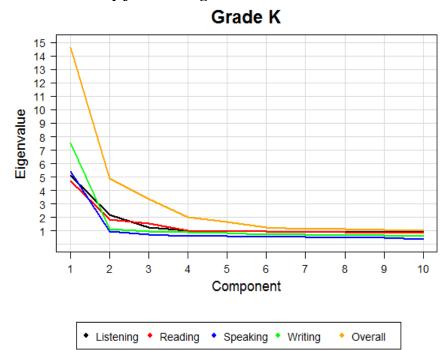
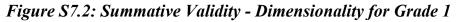
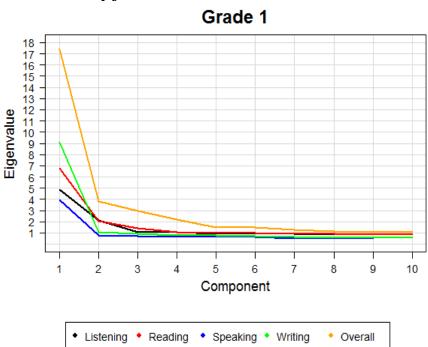


Figure S7.1: Summative Validity - Dimensionality for Kindergarten





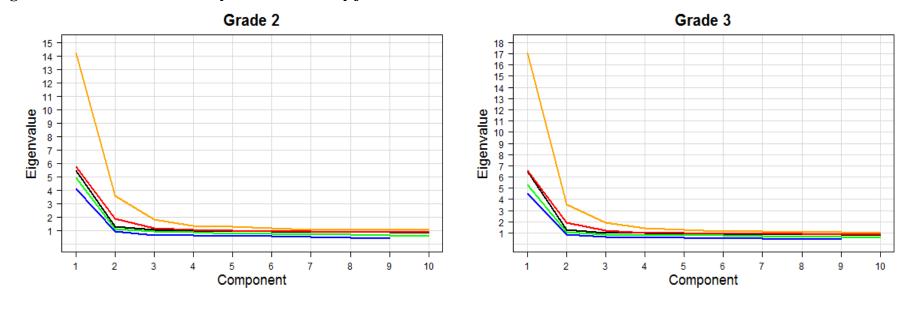


Figure S7.3: Summative Validity - Dimensionality for Grade Band 2-3

Listening • Reading • Speaking • Writing • Overall

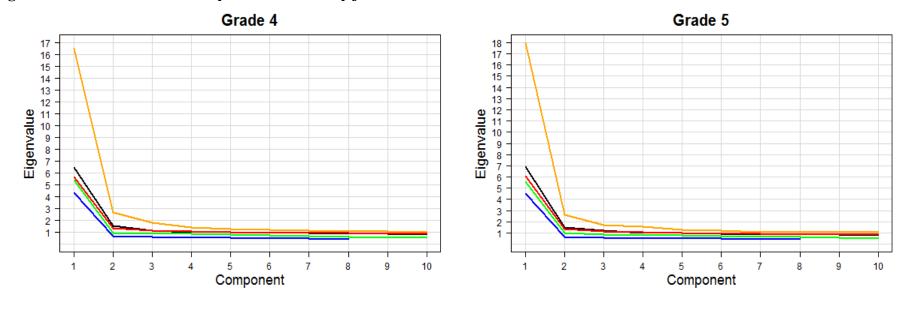


Figure S7.4: Summative Validity - Dimensionality for Grade Band 4-5

Listening • Reading • Speaking • Writing • Overall

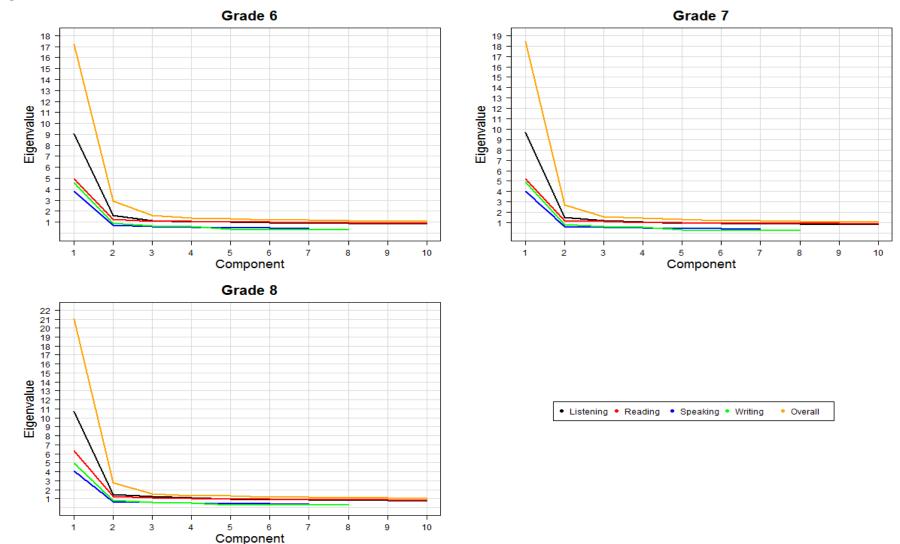


Figure S7.5: Summative Validity - Dimensionality for Grade Band 6-8

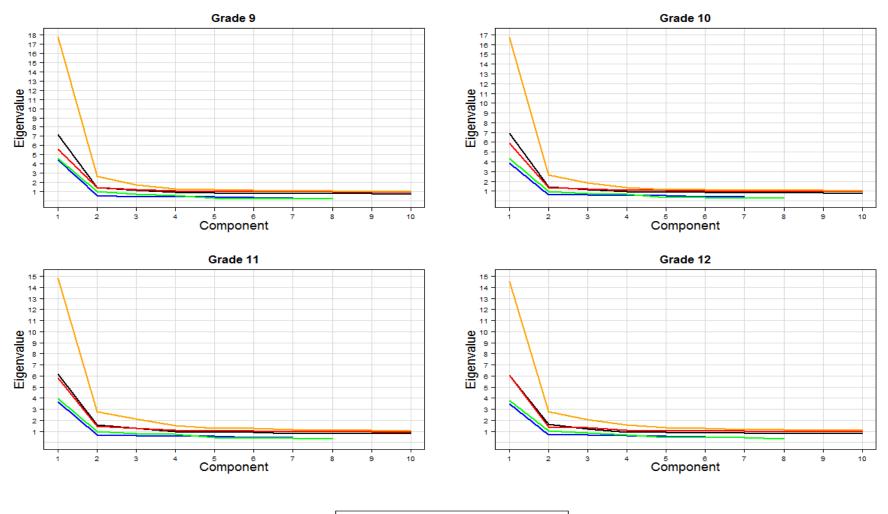


Figure S7.6: Summative Validity - Dimensionality for Grade Band 9-12

Listening
 Reading
 Speaking
 Writing
 Overall

Section 8: Summative Assessment - Ability vs. Difficulty

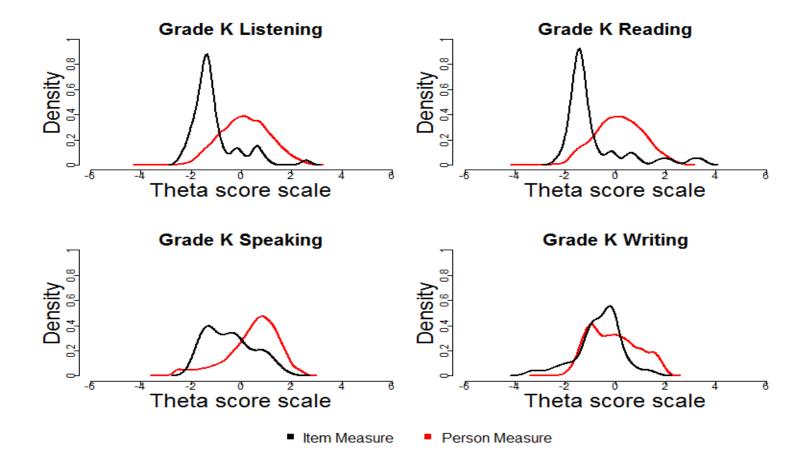


Figure S8.1: Summative Validity - Ability vs. Difficulty for Kindergarten

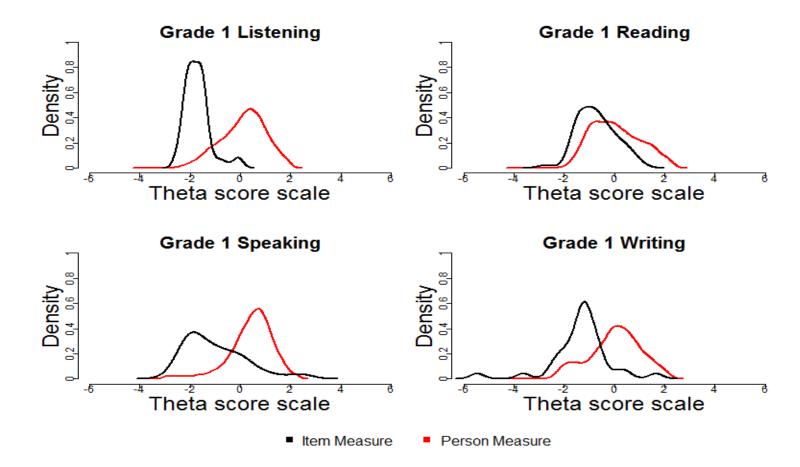


Figure S8.2: Summative Validity - Ability vs. Difficulty for Grade 1

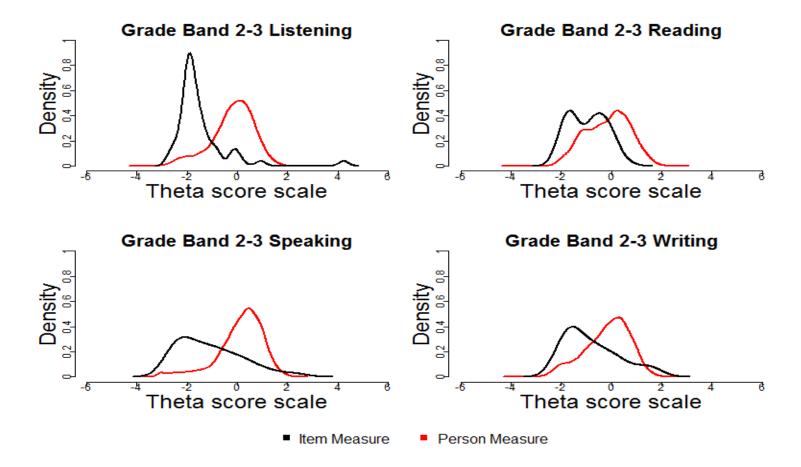


Figure S8.3: Summative Validity - Ability vs. Difficulty for Grade Band 2-3

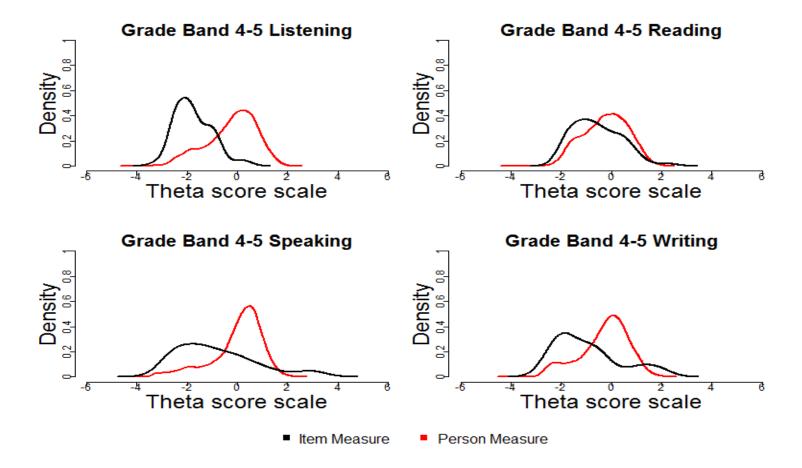


Figure S8.4: Summative Validity - Ability vs. Difficulty for Grade Band 4-5

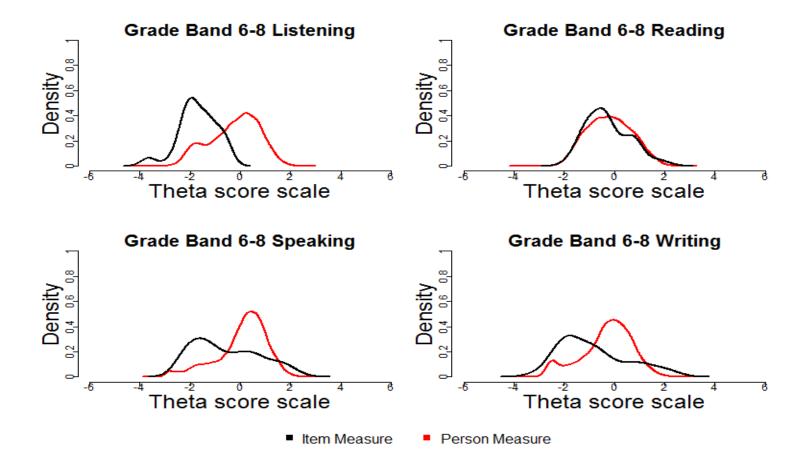


Figure S8.5: Summative Validity - Ability vs. Difficulty for Grade Band 6-8

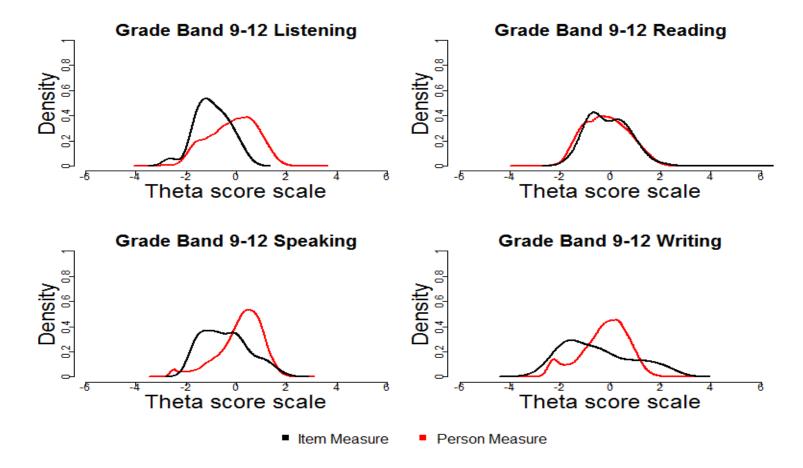


Figure S8.6: Summative Validity - Ability vs. Difficulty for Grade Band 9-12

TECHNICAL REPORT PART II—SCREENER ASSESSMENT

Ohio English Language Proficiency Screener— Listening, Reading, Speaking, and Writing

Grades K-12

2019–2020 Administration

Submitted to: Ohio Department of Education

Submitted by: Cambium Assessment, Inc. 1000 Thomas Jefferson Street, NW Washington, DC 20007

September 2020

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Chapter 1. Introduction

The English Language Proficiency Assessment for the 21st Century (ELPA21) is a testing program in which multiple states participate to support educators, member states, and members of the public as they adopt and implement the English Language Proficiency (ELP) standards and college- and career-ready standards. The assessment includes tests on listening, reading, speaking, and writing for students in kindergarten, grade 1, grades 2–3, grades 4–5, grades 6–8, and grades 9–12.

In addition to the summative assessment, in 2017, the program also developed the ELPA21 screener. The purpose of the screener is to identify students who require English language development instruction. The ELPA21 screener is an assessment of a student's language proficiency in the required domains of listening, reading, speaking, and writing. The test questions are based on the same ELP standards adopted by the ELPA21 member states. Ohio is a member of the ELPA21 consortium, and the screener assessment is called the Ohio English Language Proficiency Screener (OELPS).

Part II of the technical report focuses on the 2019–2020 test administration of the OELPS assessments. The screener assessments adopted the same achievement standards, used the same scoring method (but different additional rules as listed in Section 2.5, Scoring Rules for Screener Tests, of this report), and followed the same quality control procedures as the summative assessment. The screener scores were reported online.

Part II includes the following chapters on the screener tests:

- Chapter 1. Introduction
- Chapter 2. Test Administration
- Chapter 3. 2019–2020 Summary
- Chapter 4. Reliability
- Chapter 5. Validity
- Chapter 6. Reporting

The results of the 2019–2020 OELPS are included in this document and Part II of the appendix.

Chapter 2. Test Administration

2.1 TESTING WINDOW

The 2019–2020 testing windows were scheduled from August 5, 2019 to June 30, 2020, for the screener assessment, and from February 2 to March 27, 2019, for the summative assessment. However, in March 2020, Ohio ordered school-building closure and passed subsequent emergency legislation addressing the coronavirus (COVID-19) pandemic-related issues (House Bill 197 of the 133rd General Assembly). The Ohio General Assembly subsequently passed emergency legislation canceling the spring administration of Ohio's State Tests, including both OH ELPA summative and screener assessments¹. Therefore, both test windows were halted as of March 17, 2020, with the ordered school-building closure.

2.2 TEST DESIGN

Each 2019–2020 OELPS assessment has one online form, one paper-pencil form, and one braille form.

The online form has three steps. Step 1 consists of practice items, while Steps 2 and 3 include operational items. To allow for domain exemptions and because Test Administrator (TA) input is required (at the end of Step 1 and for the scoring of speaking items in Step 2), the three steps are administered as nine segments with various possible routes through a subset of those segments, as shown in Figure 2.1. The content of the segments includes the following:

- Segment 1 includes non-scored, practice items. At the end of Segment 1, the TA indicates whether the student should proceed to the operational items. If the TA determines that the test should not proceed, the student is directed to Segment 9, which contains one non-scored survey item, and then the test ends. Students who do not proceed to do the test are designated "Proficiency Not Demonstrated." If the TA indicates the test should proceed, then the student is routed to Segment 2 (Step 2A) unless the student is exempted from the speaking domain, in which case the student is routed to Segment 7 (modified version of Step 2).
- Segment 2 (Step 2A) consists of on-the-fly scored, speaking items. After the student responds to these items, the TA assigns a score to each item. From Segment 2 (Step 2A), most students are routed to Segment 3 (Step 2B). However, students who are exempted from the listening, reading, and/or writing domains proceed to Segment 5.
- Segment 3 (Step 2B) consists of machine-scored operational items from the listening, reading, and writing domains. After the student completes Segment 3, a summed score is computed from all the item scores in Step 2 (Segments 2 and 3). If this summed score is below a threshold score, the test ends. If the raw score meets or exceeds the threshold score, the test is routed to Segment 4 (see Table 2.1 for threshold information).

¹ Section 17(A), House Bill 197, 133rd General Assembly.

- Segment 4 (Step 3) includes operationally scored items from all domains.
- Segment 5 (Step 2B for students who are exempted from the listening, reading, and/or writing domain) consists of operational machine-scored items from all non-exempted domains. Upon completion of Segment 5, students proceed to Segment 6, regardless of score.

- Segment 7 (Step 2 for students who are exempted from the speaking domain) consists of machine-scored operational items from the listening, reading, and writing domains. Students are administered the form for which their exempted domains are suppressed. Upon completion of Segment 7, students proceed to Segment 8 regardless of score.
- Segment 8 (Step 3 for students who are exempted from the speaking domain) consists of items from all non-exempted domains in addition to the speaking domain.
- Segment 9 (Step 1) contains a survey item that allows TAs to describe why the student did not engage with the screener assessment.

The online test routing design is displayed in Figure 2.1.

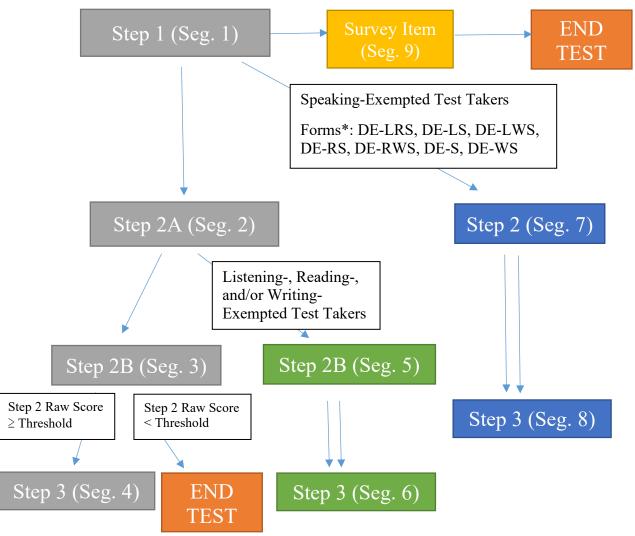


Figure 2.1 2019–2020 ELPA21 Screener Online Test Design

* DE-LRS (listening, reading, and speaking exempted), DE-LS (listening and speaking exempted), DE-LWS (listening, writing, and speaking exempted), DE-RS (reading and speaking exempted), DE-RWS (reading, writing, and speaking exempted), DE-S (speaking exempted), DE-WS (writing and speaking exempted).

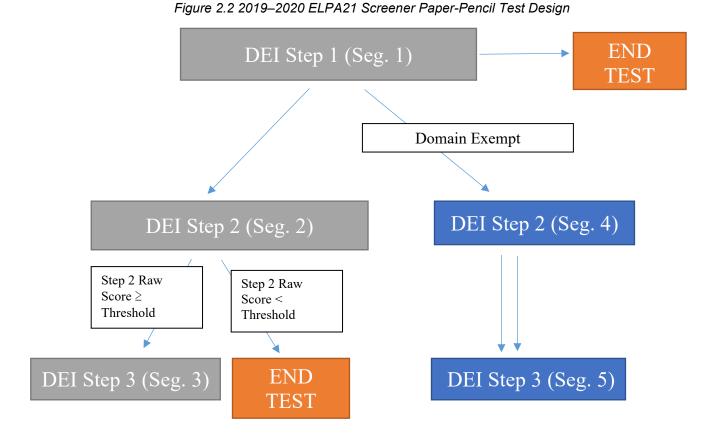
Grade Band	Threshold Score	Step 2 Max Score
K	23	26
1	24	27
2–3	25	28
4–5	26	31
6–8	28	33
9–12	27	30

 Table 2.1 Threshold Step 2 Summed Scores for Proceeding to Step 3

The paper-pencil form has five segments:

- Segment 1 (Step 1) includes non-scored, practice items. At the end of Segment 1, the TA indicates whether the student should proceed to the operational items. If the TA determines that the test should not proceed, the test ends.
- Segment 2 (Step 2) includes operational items from all four domains. After data entry is completed for Segment 2, a summed score is computed from all the item scores in this segment. If this summed score is below a threshold score, the test ends. If the raw score meets or exceeds the threshold score, the test is routed to Segment 3 (see Table 2.1 for threshold information).
- Segment 3 (Step 3) includes operational items from all four domains.
- Segment 4 (Step 2 for students with any domain exemption) and Segment 5 (Step 3 for students with any domain exemption) include operational items from all non-exempted domains. Tests proceed from Segment 4 to Segment 5 regardless of score.

Figure 2.2 displays the test design for the paper-pencil screener test. For the paper-pencil form, after test administration, student responses were entered into the Cambium Assessment, Inc. (CAI) Data Entry Interface (DEI) on the state testing portal for all ELPA21 domain tests. Practice test items were not entered in the DEI and were not scored.



operational items for all domains. If the TA indicates the student should not proceed, then the test ends. The non-domain-exempted form summary of the screener tests is listed in Tables 2.2 - 2.4.

The braille form includes two segments: In Segment 1, the TA indicates whether the student should proceed to the operational items. If so, the student is routed to Segment 2, which contains

Specifically, Table 2.2 includes items from Segments 2–4, Table 2.3 includes items from Segments 2–3, and Table 2.4 includes items from Segment 2.

Table 2.2 Number of Operational Items and Score Points—Online Scre	ener
--	------

	Grade/Grade Band											
	k	(1	2	-3	4	-5		6–8	9.	-12
Domain	Items	Score Points	ltems	Score Points	Items	Score Points	Items	Score Points	Items	Score Points	Items	Score Points
Listening	13	13	11	11	11	11	10	10	17	18	15	18
Reading	9	9	13	13	11	13	21	23	13	13	16	17
Speaking	6	14	6	15	6	14	7	21	9	27	9	27
Writing	10	10	11	11	14	17	9	21	7	23	6	20

	Grade/Grade Band											
	к		1		2–3		4–5		6–8		9–12	
Domain	Items	Score Points	Items	Score Points	ltems	Score Points	Items	Score Points	Items	Score Points	Items	Score Points
Listening	13	13	11	11	11	11	10	10	17	18	15	18
Reading	9	9	13	13	11	13	21	23	13	13	16	17
Speaking	6	14	6	15	6	14	7	21	9	27	9	27
Writing	10	10	11	11	14	17	9	21	7	23	6	20

Table 2.3 Number of Operational Items and Score Points—Paper Screener

Table 2.4 Number of Operational Items and Score Points—Braille Screener

		Grade/Grade Band												
	к		1		2–3		4–5		6–8		9–12			
Domain	Items	Score Points	Items	Score Points	ltems	Score Points	Items	Score Points	Items	Score Points	Items	Score Points		
Listening	9	9	9	9	10	10	11	11	11	12	10	13		
Reading	11	11	9	9	8	10	13	15	11	11	12	13		
Speaking	6	14	6	16	6	16	8	29	8	25	8	25		
Writing	8	8	8	8	10	13	9	21	7	23	8	26		

2.3 TEST ADMINISTRATION MANUAL

2.3.1 Directions for Administration

For the 2019–2020 administration, a Test Administration Manual (TAM) was developed for each state, including Ohio. The TAM guides TAs in test administration.

The TAM for the screener tests usually includes the following key points:

- Overview of the ELPA21 screener
- TA qualifications
- Preliminary planning
- Materials required
- Administrative considerations
- Student preparation/guidance in Step 1
- Administrative guidance in Step 2 and Step 3
- Test security instructions in each of the three steps
- Contact information for user support

2.3.2 Training/Practice Tests

To help TAs and students familiarize themselves with the online registration and test delivery systems, training or practice tests (Step 1 in screener tests) were provided before and during the testing windows. Training/practice tests can be accessed through a non-secure browser or a secure browser. For screener assessments, the tests become secure automatically when students proceed to Step 2.

The training/practice tests have two components: one for TAs to create and manage the training/practice test sessions, and the second for students to take an actual training/practice test.

The Practice Test Administration site introduces TAs to

- logging in;
- starting a test session;
- providing the session ID to the students signing in to the TA session;
- monitoring students' progress throughout their tests; and
- stopping the test.

The *Practice Tests* site introduces students to

- signing in;
- verifying student information;
- selecting a test;
- waiting for the TA to check the test settings and approve participation;
- starting the test (adjusting the audio sound, checking the microphone for recording speaking responses, and reviewing test instructions);
- taking the test; and
- submitting the test.

2.4 TEST SECURITY

The test security procedures are consistent across all assessments in each state. Details about student-level testing confidentiality, system security, testing environment security, and documentation of test security violations can be found in Chapter 9, Quality Control, in Part I of the technical report.

2.5 SCORING RULES FOR SCREENER TESTS

The scoring rules applied to the 2019–2020 OELPS include the following:

- All pending and expired test records in Step 2 should be scored.
- If a single item in Step 2 is attempted, all domains without domain exemptions are considered attempted, and all non-attempted items in Step 2 should be given a score of zero.
- If the student's test is stopped by the automatic stopping rule after Step 2, items in Step 3 should be treated as not presented. If the student's test continues to Step 3, all items in Step 3 that the student does not respond to should be scored as zero.
- If a student has a domain exemption for a domain, the domain is reported as exempt if it is not attempted.
 - For online tests, any domain exemptions must be entered in the Test Information Distribution Engine (TIDE) prior to the student starting the test. Students taking the online screener will be presented only with items in non-exempt domains.
 - For paper-pencil tests, TAs are told which items to not administer if the student has any domain exemptions. However, if a student is exempt from a domain but responses to any items in the domain are entered in the DEI, the domain will be scored as though the student was not exempt.
- For OELPS, handscored items are scored by local TAs.
- Tests in which the TA indicates that the student will not continue after the Step 1 practice items will be scored as follows:
 - Each domain will be scored 0. The score of 0 will receive a label of "Performance Not Determined."
 - Proficiency status will be scored as "D" and reported as "Proficiency Not Demonstrated."

2.6 HANDSCORING

Handscoring for screener tests followed the same procedure with the same vendor as the handscoring for summative tests (see Section 3.5 in Part I of the technical report).

2.6.1 Rules for Handscoring

The following rules are employed to handscore the items in the screener assessment:

• Each response is scored by at least one rater (R1). Ten percent of all responses receive a second reading for the purpose of monitoring and maintaining sufficient inter-rater reliability (R2).

- Final item score is reported as R1 score.
- All responses that are identified as non-scorable and assigned a condition code are routed for verification by a Team Leader or Scoring Director.

The condition code categories and the rules for evaluating a potential non-scorable response in the speaking domain are summarized in Section 3.5.1 in Part I of the technical report.

Chapter 3. 2019–2020 Summary

The 2019–2020 OELPS results are presented in this chapter and in Sections 1–3 of Part II of the appendix. The results in each section are illustrated below:

- Section 1. Screener Assessment—Scale Score Summary
 - Tables S1.1–S1.13 present the number of students, the minimum, average, maximum, and standard deviation of domain, overall, and comprehension scores by subgroups in each grade of K–12.
- Section 2. Screener Assessment—Percentage of Students by Domain Performance Level
 - Tables S2.1–S2.13 present the total number of students taking each domain test and the percentage of students in each performance level by domain test and by subgroups.
- Section 3. Screener Assessment—Percentage of Students by Overall Proficiency Level
 - Tables S3.1–S3.13 present the total number of students who are categorized in each of the overall proficiency levels: Emerging, Progressing, and Proficient by subgroups.

3.1 2019–2020 STUDENT PARTICIPATION

Table 3.1 summarizes student participation in each mode of testing. Most students took online forms (99.69%), followed by paper-pencil forms (0.31%). No student took braille forms in the 2019–2020 OELPS assessment.

Table 3.2 and Table 3.3 present the frequencies of students who took summative and screener tests, and participation by grade, respectively. The tables show that the highest percentage of students taking the screener tests were in kindergarten, followed by high school students.

Table 3.3 shows the participation by subgroup. There were more male students than female students. Most students are in the Hispanic or Latino group (26.6%-36.6%), followed by African American students (17.1%-20.7%), and Asian students (14.7%-28.1%). About 0.1%-0.4% of the students have migrated to the United States from other countries. The percentage of students who have Individualized Education Programs (IEPs) ranges from 0.7%-1.4%. About 0.7%-1.6% of the students have disabilities. Most students identified as having a speech or language impairment are in kindergarten (0.7%), grade 1 (0.4%), and grade band 2–3 (0.3%), while more students identified as having a specific learning disability are in upper grades: 0.4% in grade band 4–5, 0.7% in middle school, and 0.4% in high school.

Crada	Totol	Braille	9	Online	9	Paper		
Grade	Total —	N	%	N	%	N	%	
к	9,968	0	0.0	9,913	99.45	55	0.55	
1	1,615	0	0.0	1,614	99.94	1	0.06	
2	1,242	0	0.0	1,240	99.84	2	0.16	

Crada	T -4-1	Braill	e	Onli	ne	Paper		
Grade	Total –	N	%	N	%	N	%	
3	1,086	0	0.0	1,084	99.82	2	0.18	
4	931	0	0.0	931	100.00	0	0.00	
5	931	0	0.0	931	100.00	0	0.00	
6	783	0	0.0	781	99.74	2	0.26	
7	835	0	0.0	833	99.76	2	0.24	
8	685	0	0.0	685	100.00	0	0.00	
9	1,300	0	0.0	1,300	100.00	0	0.00	
10	680	0	0.0	680	100.00	0	0.00	
11	419	0	0.0	419	100.00	0	0.00	
12	252	0	0.0	252	100.00	0	0.00	
Total	20,727	0	0.0	20,663	99.69	64	0.31	

Table 3.2 Number of Students for 2019–2020 OELPA and OELPS

Grade/Grade Band	N OELPA	N OELPS	N Both
К	10,123	9,968	8,971
1	8,802	1,615	1,232
2–3	13,175	2,328	1,744
4–5	8,413	1,862	1,236
6–8	10,000	2,303	1,603
9–12	13,211	2,651	1,992

Cubarour	Ctatua	K		1		2-3		4-5		6-8		9-12	2
Subgroup	Status	N	%	N	%	N	%	N	%	N	%	N	%
Total		9,968	100.0	1,615	100.0	2,328	100.0	1,862	100.0	2,303	100.0	2,651	100.0
	к	9,968	100.0										
	1			1,615	100.0								
	2					1,242	53.4						
	3					1,086	46.6						
	4							931	50.0				
	5							931	50.0				
Grade	6									783	34.0		
	7									835	36.3		
	8									685	29.7		
	9											1,300	49.0
	10											680	25.7
	11											419	15.8
	12											252	9.5
	Female	4,494	45.1	717	44.4	999	42.9	835	44.8	1,034	44.9	1,149	43.3
Gender	Male	4,684	47.0	759	47.0	1,174	50.4	907	48.7	1,121	48.7	1,316	49.6
	Missing	790	7.9	139	8.6	155	6.7	120	6.4	148	6.4	186	7.0
	American Indian or Alaskan Native	24	0.2	3	0.2	5	0.2	6	0.3	6	0.3	3	0.1
	Asian	2,493	25.0	454	28.1	512	22.0	373	20.0	362	15.7	391	14.7
Ethnicity	Black or African American	1,797	18.0	276	17.1	450	19.3	371	19.9	456	19.8	548	20.7
	Hispanic or Latino	2,671	26.8	429	26.6	676	29.0	549	29.5	843	36.6	956	36.1

Table 3.3 2019–2020 Student Participation in OELPS Tests

0	04-4	K		1		2-3	i	4-5	;	6-8		9-12	2
Subgroup	Status -	Ν	%	Ν	%	N	%	N	%	N	%	N	%
	Native Hawaiian or Other Pacific Islander	46	0.5	10	0.6	15	0.6	13	0.7	10	0.4	17	0.6
	Two or More Races	1,034	10.4	165	10.2	292	12.5	244	13.1	278	12.1	334	12.6
	White	1,672	16.8	260	16.1	345	14.8	285	15.3	325	14.1	339	12.8
	Other/Unknown	231	2.3	18	1.1	33	1.4	21	1.1	23	1.0	63	2.4
	Gifted	23	0.2	9	0.6	22	0.9	14	0.8	7	0.3	1	0.0
Other	IEP	131	1.3	13	0.8	19	0.8	24	1.3	32	1.4	19	0.7
	Migrant	9	0.1	7	0.4	5	0.2	4	0.2	10	0.4	4	0.2
	Autism	38	0.4	4	0.2	3	0.1	5	0.3	4	0.2		
	Developmental delay	5	0.1					1	0.1			1	0.0
	Emotional disturbance	1	0.0	1	0.1			3	0.2			1	0.0
	Hearing Impaired	3	0.0			1	0.0	1	0.1				
	Intellectual Disability	5	0.1			2	0.1	2	0.1	3	0.1	4	0.2
Primary Disability	Multiple disabilities	9	0.1			3	0.1	2	0.1	1	0.0	1	0.0
	Orthopedic impairment	2	0.0	1	0.1			1	0.1				
	Other health impairment	7	0.1	1	0.1	3	0.1	2	0.1	8	0.3	3	0.1
	Specific learning disability	7	0.1	1	0.1	2	0.1	7	0.4	15	0.7	11	0.4
	Speech or language impairment	65	0.7	6	0.4	6	0.3	2	0.1			1	0.0
	Visual impairment									1	0.0		

3.2 2019–2020 Student Scale Score and Performance Summary

Table 3.4 shows the number and percentages of students who had a domain exemption in each grade (K–4). Table 3.5–Table 3.7 show the number of students, minimum, mean, maximum, and standard deviation of domain, comprehension, and overall scale scores in each grade. The OELPS tests are not vertically linked across all grades. Scale score summary by subgroup for each grade is also presented in Section 1 of Part II of the appendix.

Table 3.8, Table 3.9, and Figure 3.1 present the percentage of students by level in each domain test. The results indicate that most students have achieved performance Level 1 in reading, speaking, and writing in grades 1–10. Most students scored at Level 5 in listening in grades 4–6, but in grades 7–10, most students scored at Level 1. Students who scored at Level 4 had overall lower percentages in reading, speaking, and writing. Percentage of students by performance Level by subgroup for each grade is also presented in Section 2 of Part II of the appendix.

Table 3.10 and Figure 3.2 present the percentage of students by the overall proficiency level. The results show the majority of students who achieved the Emerging or Progressing category. The percentage of students who are proficient increases from kindergarten to grade 4, then consistently decreases until grade 9, and slightly increases after grade 9. The percentage of students in the Emerging category is relatively stable until grade 6, increases until grade 9, and then consistently drops afterward. Section 3 of Part II of the appendix displays the overall proficiency level by subgroup for each grade.

Grade	Total	Listening	Reading	Speaking	Writing
к	9,968	3 (0.0%)	2 (0.2%)	5 (0.7%)	2 (0.8%)
2	1,242	1 (0.1%)	0 (0.0%)	1 (0.1%)	0 (0.0%)
3	1,086	0 (0.0%)	1 (0.1%)	1 (0.1%)	1 (0.1%)
4	931	1 (0.1%)	1 (0.1%)	2 (0.5%)	1 (0.1%)

Table 3.4 Summary of Domain Exemptions

* Other grades do not have domain exemptions.

		L	istening					Reading		
Grade	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
К	9,559	314	524.0	714	67.3	9,560	318	520.5	708	66.5
1	1,524	288	509.4	678	91.4	1,524	286	492.8	704	96.8
2	1,159	286	483.9	710	85.7	1,160	278	473.3	734	92.4
3	1,002	286	501.7	710	101.6	1,001	278	497.0	734	111.5
4	829	270	494.0	778	119.0	829	270	496.1	795	117.3
5	834	270	507.2	772	125.0	834	270	510.4	786	124.2
6	675	279	507.4	738	113.2	675	296	511.6	733	109.0
7	673	279	502.5	738	119.1	673	296	508.9	733	115.6
8	577	279	502.0	738	114.0	577	296	510.7	733	109.2
9	1,042	297	482.1	731	109.9	1,042	309	487.1	733	105.4
10	611	297	513.8	731	105.1	611	309	518.5	733	101.1
11	388	297	539.2	731	108.1	388	309	542.5	733	102.6
12	230	297	553.7	731	102.6	230	309	557.7	733	98.9

Table 3.5 Scale Score Summary—Listening and Reading

* Domains with Exemption are excluded. * Scale scores cannot be compared across grade bands.

		S	speaking					Writing		
Grade	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
К	9,557	339	517.4	711	82.2	9,560	347	486.5	684	62.5
1	1,524	310	491.5	669	102.6	1,524	283	489.0	698	98.0
2	1,159	292	464.9	703	104.4	1,160	276	469.0	737	94.8
3	1,001	292	481.3	703	121.4	1,001	276	494.6	737	113.5
4	828	270	504.0	786	151.3	829	268	496.0	797	125.7
5	834	270	516.2	782	151.1	834	268	511.0	791	130.6
6	675	296	518.6	732	125.7	675	281	507.6	741	115.4
7	673	296	507.4	732	132.5	673	281	504.7	741	121.5
8	577	296	510.0	732	128.5	577	281	506.2	741	116.3
9	1,042	332	494.2	722	119.1	1,042	315	487.9	732	105.5
10	611	332	526.9	722	109.8	611	315	519.0	732	101.2
11	388	332	555.6	722	110.0	388	315	543.6	732	104.7
12	230	332	570.9	722	101.8	230	315	555.8	732	100.5

Table 3.6 Scale Score Summary—Speaking and Writing

* Domains with Exemption are excluded. * Scale scores cannot be compared across grade bands.

		Com	prehens	ion				Overall		
Grade	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
К	9,562	3978	5394.1	6375	492.9	9,562	3646	5167.7	6763	529.5
1	1,524	3785	5199.7	6387	631.9	1,524	3364	5050.7	6629	778.4
2	1,160	3756	5040.9	6439	633.4	1,160	3326	4861.2	6880	752.8
3	1,002	3756	5166.0	6439	729.0	1,002	3326	5031.1	6880	900.7
4	830	3649	5056.0	6700	723.3	830	3237	5071.2	7401	1,027.2
5	834	3649	5144.2	6700	771.4	834	3237	5181.6	7352	1,060.4
6	675	3803	5181.1	6476	721.8	675	3388	5188.2	6974	921.7
7	673	3803	5151.3	6476	759.6	673	3388	5142.3	6974	974.7
8	577	3803	5155.0	6476	725.0	577	3388	5154.6	6974	932.3
9	1,042	3787	5012.1	6524	725.2	1,042	3605	4999.5	6923	878.2
10	611	3787	5228.9	6524	704.7	611	3605	5257.8	6923	826.4
11	388	3787	5384.3	6524	703.8	388	3605	5466.1	6923	843.1
12	230	3787	5502.2	6524	682.5	230	3605	5580.2	6923	795.6

Table 3.7 Scale Score Summary—Comprehension and Overall

* Scale scores cannot be compared across grade bands.

			Li	stening						R	eading			
Grade	N	0	1	2	3	4	5	N	0	1	2	3	4	5
к	9,962	4.0	18.3	14.6	56.2	2.7	4.1	9,963	4.0	21.6	18.3	46.5	4.3	5.2
1	1,610	5.3	23.4	6.7	31.6	12.7	20.2	1,610	5.3	46.8	11.4	17.1	8.0	11.4
2	1,234	6.1	22.7	9.8	24.1	19.2	18.2	1,235	6.1	45.5	8.0	21.4	8.7	10.3
3	1,076	6.9	22.0	12.4	20.0	19.7	19.1	1,075	6.9	45.7	13.6	16.9	6.3	10.6
4	910	8.9	26.4	6.7	11.3	17.0	29.7	910	8.9	38.2	8.1	13.2	9.9	21.6
5	912	8.6	27.5	6.4	9.1	19.8	28.6	912	8.6	37.9	12.2	14.1	7.3	19.8
6	771	12.5	23.7	7.4	11.7	16.5	28.3	771	12.5	35.3	5.6	18.8	7.7	20.2
7	829	18.8	31.1	6.9	13.3	7.2	22.7	829	18.8	39.4	7.8	12.9	7.2	13.8
8	682	15.4	32.0	9.7	15.0	8.5	19.5	682	15.4	42.2	8.9	19.8	5.1	8.5
9	1,273	18.1	39.3	8.7	14.3	5.9	13.7	1,273	18.1	45.9	10.8	14.2	4.1	6.8
10	676	9.6	29.7	11.7	19.1	10.8	19.1	676	9.6	38.0	15.2	21.0	6.4	9.8
11	414	6.3	23.7	10.1	20.8	9.2	30.0	414	6.3	30.2	16.9	23.7	8.0	15.0
12	249	7.6	16.1	8.8	25.3	10.0	32.1	249	7.6	21.7	15.7	30.9	8.8	15.3

Table 3.8 Percentage of Students by Performance Level—Listening and Reading

* Level 0: Performance Not Determined. * Domains with Exemption are excluded.

Oursele			SI	peaking			_			١	Vriting			
Grade	N	0	1	2	3	4	5	N	0	1	2	3	4	5
к	9,960	4.0	32.9	21.3	24.7	9.7	7.3	9,963	4.0	59.5	25.8	8.0	1.4	1.2
1	1,610	5.3	55.3	17.5	3.6	5.7	12.6	1,610	5.3	53.9	12.3	15.3	4.8	8.4
2	1,234	6.1	52.2	13.0	8.1	7.9	12.8	1,235	6.1	44.9	11.5	18.3	7.9	11.3
3	1,075	6.9	48.0	9.9	8.7	9.4	17.2	1,075	6.9	47.2	12.7	14.3	6.0	12.8
4	909	8.9	36.9	7.9	8.7	4.6	33.0	910	8.9	36.0	7.0	18.4	7.3	22.4
5	912	8.6	37.7	9.1	7.5	5.8	31.4	912	8.6	32.1	9.5	23.2	5.7	20.8
6	771	12.5	30.4	8.8	14.8	5.3	28.3	771	12.5	27.9	9.5	21.5	4.9	23.7
7	829	18.8	34.9	8.9	9.4	3.9	24.1	829	18.8	37.8	8.9	11.3	5.3	17.9
8	682	15.4	35.5	9.8	12.5	5.7	21.1	682	15.4	39.7	11.6	14.8	4.7	13.8
9	1,273	18.1	41.2	10.0	10.8	2.7	17.1	1,273	18.1	46.7	9.3	12.0	3.7	10.1
10	676	9.6	32.5	16.1	13.2	4.3	24.3	676	9.6	37.0	15.5	16.6	6.8	14.5
11	414	6.3	25.4	15.2	14.5	4.8	33.8	414	6.3	30.4	14.5	20.3	7.0	21.5
12	249	7.6	18.5	15.3	16.5	6.8	35.3	249	7.6	22.9	16.9	20.5	10.0	22.1

Table 3.9 Percentage of Students by Performance Level—Speaking and Writing

* Level 0: Performance Not Determined. * Domains with Exemption are excluded.

Grade	Ν	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
к	9,965	28.6	64.8	2.5	4.0
1	1,610	29.4	54.3	10.9	5.3
2	1,235	32.3	47.3	14.3	6.1
3	1,076	34.3	43.9	15.0	6.9
4	911	32.9	30.4	27.8	8.9
5	912	33.4	33.6	24.5	8.6
6	771	29.4	33.3	24.8	12.5
7	829	36.9	24.5	19.8	18.8
8	682	39.9	31.4	13.3	15.4
9	1,273	45.8	25.9	10.1	18.1
10	676	39.2	36.1	15.1	9.6
11	414	31.9	40.3	21.5	6.3
12	249	22.5	47.4	22.5	7.6

Table 3.10 Percentage of Students by Overall Proficiency Level

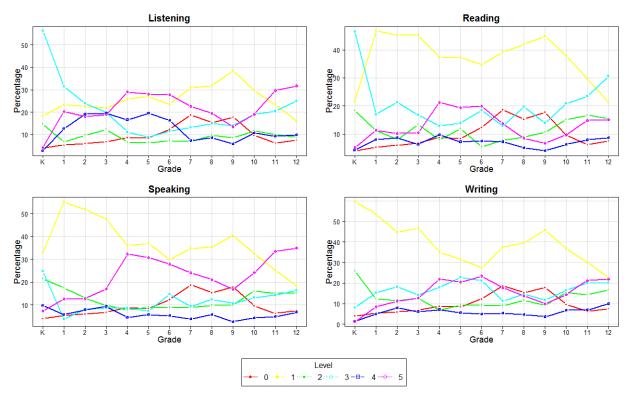


Figure 3.1 Percentage of Students in Performance Levels

- * Level 0: Performance Not Determined. * Domains with Exemption are excluded.

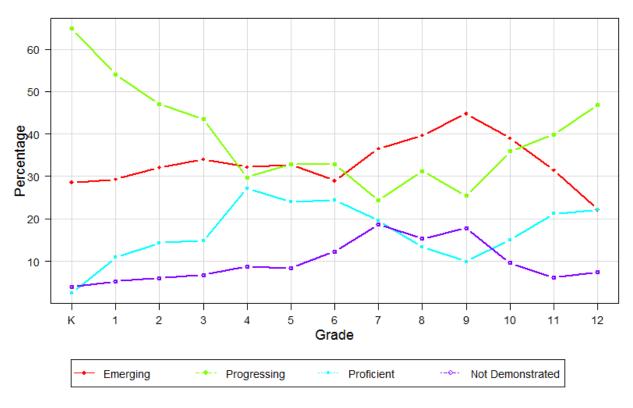


Figure 3.2 Percentage of Students in Proficiency Levels

3.3 2019–2020 Testing Time for Online Tests

In the 2019–2020 OELPS tests, students who did not have domain exemption proceeded to Segments 2 and 3 (Step 2) and proceeded to Segment 4 (Step 3) if their raw scores met or exceeded the threshold score for Step 2 (Table 2.1). Therefore, students who exited at Step 3 took more items than those who stopped at Step 2. Table 3.11 summarizes testing time by end step in each grade/grade band for the OELPS tests. Testing time was computed based on page time for each item that a student spent on in Steps 1 and 2, plus 3 if a student proceeded to Step 3. Therefore, page time for TAs' responses, such as the time TAs spent on scoring the Step 2A items, was not included in the testing time summary. In addition, students who had any non-attempted or exempted domains or had proficiency not demonstrated are excluded. As expected, students who ended the test at Step 3 had longer testing times than those who ended at Step 2. In addition, upper grade tests had longer testing times than the lower grade tests due to the tests being longer and the items being more complex.

^{*} Proficiency Not Attempted is excluded.

Grade/Grade	Find Otom		N of				Testing	Time (Mi	inutes)			
Band	End Step	N	Items	Min	P10	P25	P50	Mean	P75	P90	Max	SD
к	Step 2	8,350	27	1.3	7.6	8.9	10.6	11.4	13.1	16.2	68.3	4.0
n	Step 3	1,123	43	8.9	15.9	17.8	20.4	21.9	24.6	29.8	71.7	6.5
1	Step 2	918	28	2.1	9.6	11.2	13.1	14.1	16.0	19.5	45.0	4.6
	Step 3	595	46	14.1	20.4	23.7	27.7	29.3	33.4	39.8	73.2	8.3
2-3	Step 2	1,304	30	2.9	10.0	11.7	14.3	15.2	17.8	21.8	37.6	4.9
2-3	Step 3	822	48	19.3	29.1	34.1	41.4	44.0	49.9	60.5	136.1	14.8
4-5	Step 2	895	32	1.6	13.2	16.8	21.2	22.9	27.1	34.8	88.2	9.4
4-5	Step 3	748	54	18.8	32.7	38.0	46.0	49.4	57.6	71.0	118.2	15.5
6-8	Step 2	1,038	31	2.1	12.6	17.5	24.2	26.3	31.9	42.0	140.7	13.1
0-0	Step 3	873	54	20.9	34.8	40.9	50.0	52.9	60.9	75.0	182.1	16.9
0.42	Step 2	1,408	32	1.1	16.8	22.1	29.6	32.7	39.3	52.3	159.3	16.0
9-12	Step 3	838	54	21.5	36.3	43.5	54.7	57.6	66.9	82.5	159.1	19.7

Table 3.11 Testing Time for the 2019–2020 Online Screener Tests

Chapter 4. Reliability

In the same procedure as the summative assessment described in Chapter 6 in Part I of the technical report, the screener reliability for screener tests is assessed using

- marginal standard error of measurement (MSEM);
- marginal reliability;
- conditional standard error of measurement (CSEM); and
- classification accuracy and consistency.

In addition, since OELPS adopted local TAs for handscoring in the 2019–2020 administration, inter-rater analysis is not conducted. The results for the 2019–2020 OELPS assessment are illustrated in this chapter and in Section 4 of Part II of the appendix:

- Section 4. Screener Assessment—Conditional Standard Error of Measurement (CSEM)
 - Figures S4.1–S4.13 show the CSEM plots for each domain, overall, and comprehension scores. If a test applies to multiple grades, the CSEM plots are broken down by grade. In 2019–2020 OELPS tests, students can end the test at Step 2 or Step 3. The CSEM plots use different colors to differentiate the students who ended the test at different steps.

4.1 MARGINAL STANDARD ERROR OF MEASUREMENT

As described in Part I, the MSEM is a way to examine score reliability. The ratio of MSEM and the standard deviation of scale scores can also indicate the measure errors, and the analysis for the ratio is displayed in Figure 4.1.

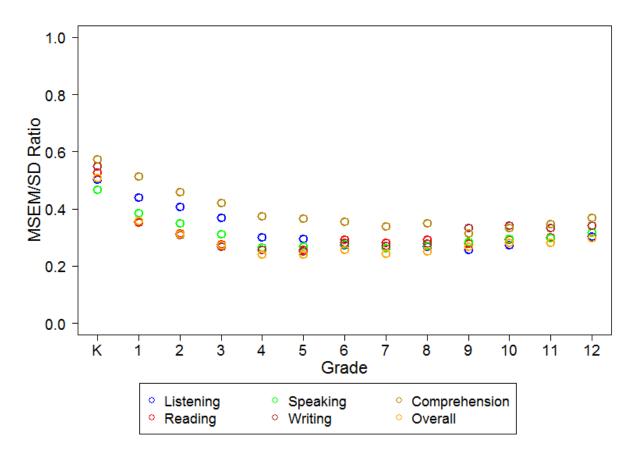


Figure 4.1 Ratio of Marginal Standard Error of Measurement to Standard Deviation of Estimated Scale Scores by Grade and Domain

* Domains with Exemption are excluded.

4.2 MARGINAL RELIABILITY

Table 4.1 and Figure 4.2 show the marginal reliability by grade. The marginal reliabilities by domain were obtained using the domain scores based on the MIRT models, and the overall/comprehension marginal reliabilities were obtained using the overall/comprehension scores based on the bi-factor models. Kindergarten has lower marginal reliability than the other grades. Writing has lower marginal reliability at kindergarten and high school grades but has higher reliability from grades 1–5. Listening has relatively lower reliability than the other domains in grades 1–5. In addition, Section 4 of Part II of the appendix displays CSEM plots by grade. Groups with fewer than 50 students were excluded from the plots of marginal reliability by groups.

Grade	Ν	Listening	Reading	Speaking	Writing	Comprehension	Overall
к	9,557	.75	.72	.78	.70	.67	.74
1	1,524	.81	.88	.85	.87	.74	.87
2	1,159	.84	.90	.88	.90	.79	.90
3	1,001	.86	.92	.90	.93	.82	.93
4	828	.91	.93	.93	.93	.86	.94
5	834	.91	.93	.93	.94	.87	.94
6	675	.92	.91	.92	.92	.87	.93
7	673	.93	.92	.93	.93	.88	.94
8	577	.93	.92	.93	.92	.88	.94
9	1,042	.93	.92	.92	.89	.90	.93
10	611	.92	.91	.91	.88	.89	.92
11	388	.92	.91	.91	.89	.88	.92
12	230	.91	.90	.90	.88	.86	.91

Table 4.1 Marginal Reliability

* Domains with Exemption are excluded.

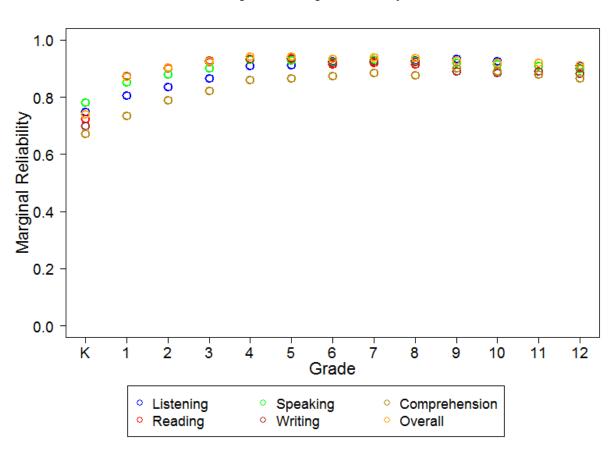


Figure 4.2 Marginal Reliability

* Domains with Exemption are excluded.

4.3 CLASSIFICATION ACCURACY AND CONSISTENCY

As described in Section 6.4 in Part I, Classification accuracy (CA) analysis investigates how precisely students are classified into each performance level. Classification consistency (CC) analysis investigates how consistently students are classified into each performance level across two independent administrations of equivalent forms. Since obtaining test scores from two independent administrations is not feasible due to issues such as logistics and cost constraints, the CC index is computed with the assumption that the same test is independently administered twice to the same group of students. Table 4.2 presents overall classification accuracy and consistency by domain. Classification consistency rates can be lower than classification accuracy because consistency is based on two tests with measurement errors, while accuracy is based on one test with a measurement error and the true score.

Table 4.3 and Figure 4.3 show classification accuracy, and Table 4.4 and Figure 4.4 display the classification consistency for each cut score. Across the four performance cut scores, the classification accuracy indices are all above 0.8, denoting that the degree to which we can reliably

differentiate students between adjacent performance levels is typically above 0.8. In terms of classification consistency, the indices are all above 0.7 in all cuts and all grades. The accuracy indices in grades 4 and higher are above 0.9 for all domains. Table 4.5 and Figure 4.5 display the classification accuracy and consistency for overall proficiency levels. The plot shows that all the accuracy and consistency indices are above 0.8. The accuracy indices for cut 1 are lower than those for cut 2 in kindergarten and are comparable than those for cut 2 in the other grades.

Orreade		Accu	racy		_	Consis	tency	
Grade	Listening	Reading	Speaking	Writing	Listening	Reading	Speaking	Writing
К	.69	.60	.59	.72	.57	.48	.51	.63
1	.63	.72	.71	.76	.53	.65	.66	.69
2	.63	.75	.71	.76	.53	.68	.66	.69
3	.65	.76	.73	.78	.55	.70	.68	.72
4	.74	.78	.80	.79	.66	.72	.76	.73
5	.76	.78	.79	.79	.68	.72	.74	.72
6	.77	.77	.77	.77	.69	.70	.71	.69
7	.80	.79	.81	.80	.73	.73	.75	.74
8	.77	.79	.78	.79	.69	.73	.72	.72
9	.80	.82	.81	.78	.74	.76	.75	.72
10	.75	.76	.76	.71	.67	.69	.68	.64
11	.76	.73	.75	.71	.68	.65	.68	.63
12	.75	.70	.73	.67	.66	.62	.65	.59

Table 4.2 OELPS Overall Classification Accuracy and Consistency for Domain Performance Levels byGrade and Domain

* Domains with Exemption are excluded.

Orreda		Liste	ening			Rea	ding			Spea	aking			Wri	ting	
Grade	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4
к	.91	.85	.92	.96	.88	.82	.88	.94	.87	.84	.89	.92	.81	.93	.98	.98
1	.92	.90	.86	.88	.90	.92	.93	.94	.88	.89	.90	.91	.93	.92	.93	.94
2	.91	.92	.88	.89	.93	.92	.93	.95	.90	.90	.91	.92	.92	.92	.94	.96
3	.91	.94	.89	.89	.94	.92	.93	.95	.93	.91	.91	.91	.94	.94	.94	.95
4	.93	.95	.93	.92	.95	.95	.94	.94	.94	.94	.94	.95	.95	.95	.94	.94
5	.95	.95	.92	.92	.94	.94	.94	.94	.94	.93	.94	.93	.94	.94	.94	.94
6	.94	.95	.94	.93	.94	.95	.93	.94	.95	.93	.93	.94	.92	.94	.95	.94
7	.95	.96	.94	.93	.96	.95	.93	.93	.95	.94	.95	.94	.94	.95	.95	.94
8	.94	.95	.94	.93	.95	.95	.93	.94	.94	.93	.94	.94	.94	.94	.94	.94
9	.94	.95	.95	.95	.95	.95	.95	.96	.94	.95	.95	.95	.92	.94	.95	.95
10	.93	.94	.94	.93	.93	.93	.94	.94	.93	.93	.94	.93	.90	.92	.94	.93
11	.95	.94	.93	.92	.93	.93	.92	.92	.93	.93	.94	.93	.91	.91	.93	.92
12	.96	.94	.92	.91	.94	.91	.91	.91	.93	.92	.93	.92	.91	.91	.91	.91

Table 4.3 Classification Accuracy for Each Cut

* Domains with Exemption are excluded. * Cuts 1 to 4 fall between performance Levels 1 and 2, 2 and 3, 3 and 4, 4 and 5, respectively.

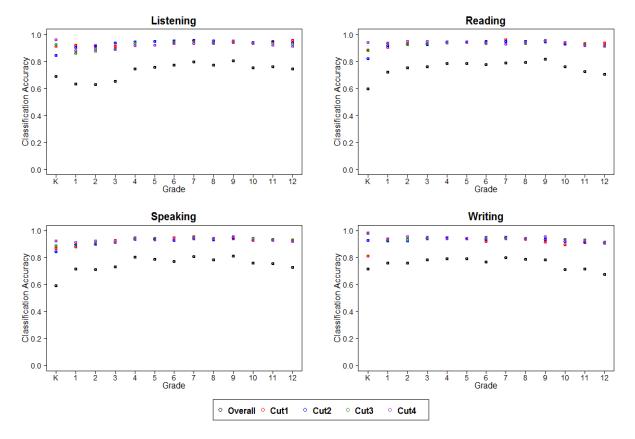
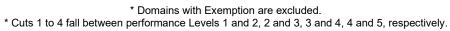


Figure 4.3 Classification Accuracy



Overale	Listening					Reading				Spea	aking			Writing			
Grade	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	Cut 1	Cut 2	Cut 3	Cut 4	
к	.87	.78	.88	.94	.83	.75	.83	.91	.81	.79	.85	.89	.74	.89	.97	.98	
1	.88	.86	.81	.84	.86	.88	.90	.91	.84	.85	.86	.88	.89	.89	.90	.92	
2	.87	.88	.83	.85	.90	.89	.90	.92	.86	.86	.87	.89	.89	.89	.91	.94	
3	.88	.90	.85	.85	.91	.90	.91	.92	.90	.88	.88	.88	.91	.91	.92	.93	
4	.90	.92	.90	.88	.92	.92	.91	.91	.92	.91	.92	.92	.92	.93	.92	.91	
5	.92	.92	.89	.89	.92	.92	.92	.92	.92	.91	.91	.90	.92	.92	.92	.92	
6	.91	.93	.92	.90	.91	.92	.90	.91	.92	.90	.90	.91	.88	.91	.93	.92	
7	.93	.94	.92	.90	.94	.93	.90	.90	.93	.92	.93	.92	.92	.93	.92	.91	
8	.91	.93	.91	.90	.92	.92	.91	.92	.92	.91	.91	.92	.91	.92	.92	.92	
9	.91	.93	.93	.93	.92	.92	.94	.94	.91	.93	.93	.93	.88	.91	.93	.94	
10	.91	.91	.91	.90	.90	.90	.91	.92	.90	.90	.92	.90	.86	.89	.91	.91	
11	.93	.92	.90	.89	.90	.89	.89	.89	.90	.90	.91	.89	.88	.88	.90	.89	
12	.94	.91	.89	.87	.91	.88	.87	.88	.91	.89	.90	.88	.87	.87	.88	.87	

Table 4.4 Classification Consistency for Each Cut

* Domains with Exemption are excluded. * Cuts 1 to 4 fall between performance Levels 1 and 2, 2 and 3, 3 and 4, 4 and 5, respectively.

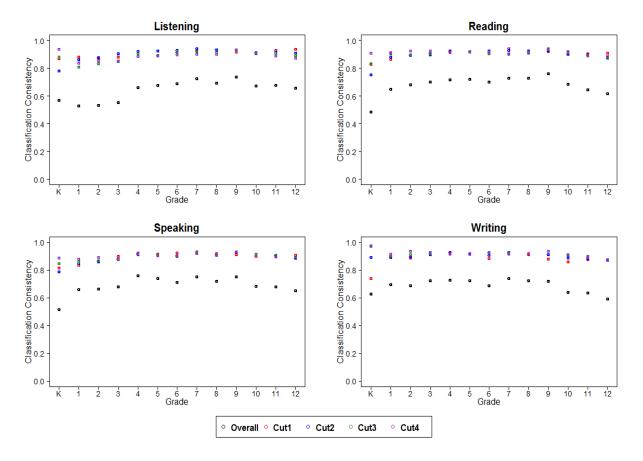


Figure 4.4 Classification Consistency

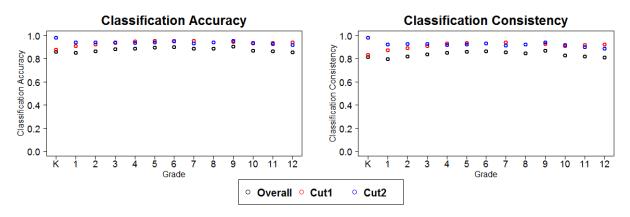
* Domains with Exemption are excluded. * Cuts 1 to 4 fall between performance Levels 1 and 2, 2 and 3, 3 and 4, 4 and 5, respectively.

Crada		Accuracy		Consistency					
Grade	Overall	Cut 1	Cut 2	Overall	Cut 1	Cut 2			
к	.86	.88	.98	.81	.83	.98			
1	.85	.91	.94	.80	.87	.92			
2	.86	.92	.94	.82	.89	.93			
3	.88	.94	.94	.84	.91	.93			
4	.89	.95	.94	.85	.93	.92			
5	.90	.95	.94	.86	.94	.92			
6	.90	.95	.95	.86	.93	.93			
7	.89	.96	.93	.86	.94	.92			
8	.89	.94	.94	.85	.92	.92			
9	.90	.95	.96	.87	.93	.94			
10	.87	.93	.94	.83	.91	.92			
11	.86	.94	.93	.82	.92	.90			
12	.86	.94	.92	.81	.92	.89			

Table 4.5 Screener Classification for Proficiency Levels

* Cut 1: Cut between Emerging and Progressing; Cut 2: Cut between Progressing and Proficient.

Figure 4.5 Proficiency Classification



* Cut 1: Cut between Emerging and Progressing; Cut 2: Cut between Progressing and Proficient.

Chapter 5. Validity

Discussions on the test development, form construction, scaling, equating, and standard setting can be found in the related documents from ELPA21.

Since the items and the item parameters in the screener tests are from the item pool for summative tests, and the purpose of the screener is for the prediction of students' English proficiency levels, instead of evaluating the validity aspects as those for the summative tests, we evaluate the relationships between the screener and summative tests and summarize the student progress from the time they took screener tests to the time they took summative tests. The statistical methods and the results are presented in this chapter and Sections 5–6 of Part II of the appendix:

- Section 5. Student Progress from Screener to Summative—Scatter Plots of Scale Score Change
 - Figures S5.1–S5.6 display the scatter plot of scale score change from screener to summative for each grade band.
- Section 6. Student Progress from Screener to Summative—Comparison of Scale Scores
 - Tables S6.1–S6.6 summarize the comparisons of scale score summary statistics between screener and summative for each domain, overall, and comprehension scores.

5.1 CORRELATIONS BETWEEN SUMMATIVE AND SCREENER TESTS

Students who took the ELPA21 screener and were classified as not proficient would in general be expected to also have been administered the ELPA21 summative assessment. The test questions on the screener and summative assessments are drawn from the same item pools and assess the same ELP standards adopted by the state of Ohio. We identified the students who completed both the screener and summative assessments and compared their performance across the two occasions.

The correlation between the scale scores from the summative and screener tests is assessed using Pearson correlations. The correlation between the performance levels from both tests is assessed using Goodman and Kruskal's Gamma correlation (Goodman & Kruskal, 1954). The gamma correlation, or gamma statistics, is for ordinal level data with a small number of response categories. It is designed to determine how effectively a researcher can use the information about an individual measured on one variable to predict the measure of the individual on another variable. The correlation results are presented in Table 5.1 and Table 5.2.

Table 5.1 shows the Pearson correlation between the screener and the summative tests in domain and composite scores. Correlations of all types of scores are the lowest in the kindergarten test, followed by the grade 1 test; the correlations are above 0.75 in each domain and composite scale scores in grade 2 and above, except for grades 4–5 reading and comprehension scores. The speaking tests have relatively higher correlations than the other three domains in kindergarten and grade 1 but have lower correlations in middle and high school.

Table 5.2 shows the Gamma correlations between domain performance levels and test proficiency levels. Similar to the correlations between scale scores presented in Table 5.1, kindergarten has

the lowest correlations in all domain performance levels and overall proficiency levels. For grade 2 and above, the correlations are about 0.8 except for the speaking domain. In addition, the correlations between proficiency levels are overall higher than those between domain performance levels. This is because there are three levels in overall proficiency while there are five levels in domain performance. These correlations show predictive validity between the two OELP tests because they were given to the same students at different times.

Grade/Grade	Listening		Read	Reading		Speaking		Writing		Comprehension		Overall	
Band	N	Corr	N	Corr	N	Corr	N	Corr	N	Corr	N	Corr	
К	8,558	.57	8,488	.55	8,336	.65	8,474	.47	8,588	.50	8,613	.65	
1	1,140	.74	1,134	.70	1,110	.77	1,117	.72	1,147	.72	1,150	.79	
2–3	1,588	.78	1,571	.80	1,527	.79	1,559	.81	1,593	.78	1,601	.83	
4–5	1,036	.79	1,022	.74	1,001	.77	1,014	.81	1,042	.74	1,050	.81	
6–8	1,254	.83	1,243	.78	1,206	.75	1,236	.81	1,263	.80	1,272	.84	
9–12	1,619	.83	1,619	.80	1,570	.75	1,597	.81	1,636	.80	1,655	.84	

Table 5.1 Pearson Correlations Between Scale Scores for the Screener and Summative Assessments

* Results are based on subset of students with results for both the screener and summative assessments.

Table 5.2 Gamma Correlations Between Domain/Proficiency Classifications for the Screener and
Summative Assessments

Grade/Grade Band	Listening		Reading		Spea	Speaking		Writing		Overall Proficiency	
Бапа	N	Corr	N	Corr	N	Corr	N	Corr	N	Corr	
К	8,558	.66	8,488	.59	8,336	.63	8,474	.54	8,613	.83	
1	1,140	.77	1,134	.76	1,110	.70	1,117	.80	1,150	.92	
2–3	1,588	.81	1,571	.86	1,527	.75	1,559	.86	1,601	.92	
4–5	1,036	.83	1,022	.83	1,001	.77	1,014	.90	1,050	.93	
6–8	1,254	.87	1,243	.86	1,206	.74	1,236	.90	1,272	.97	
9–12	1,619	.89	1,619	.89	1,570	.78	1,597	.90	1,655	.95	

* Results are based on subset of students with results for both the screener and summative assessments.

5.2 STUDENT PROGRESS FROM SCREENER TO SUMMATIVE

Student progress from the time they took screener tests to the time they took summative tests is evaluated by the changes in scale scores and performance levels. The major confounding factor in this result is the measurement error in both assessments. Given the acceptable marginal reliability indices described in Chapter 6 of the technical report Part I and Chapter 4 of the technical report Part II, we can still see the trend of student progress.

Figure 5.1 and Figure 5.2 show the growth of the average domain scores and composite scores, respectively. The average scale scores in the summative assessment are, in general, higher than those in the screener assessment. In addition, Section 5 of the appendix Part II presents a scatter plot of scale score changes from screener to summative assessments for each grade or grade band, and Section 6 summarizes a comparison of scale scores between screener and summative assessments.

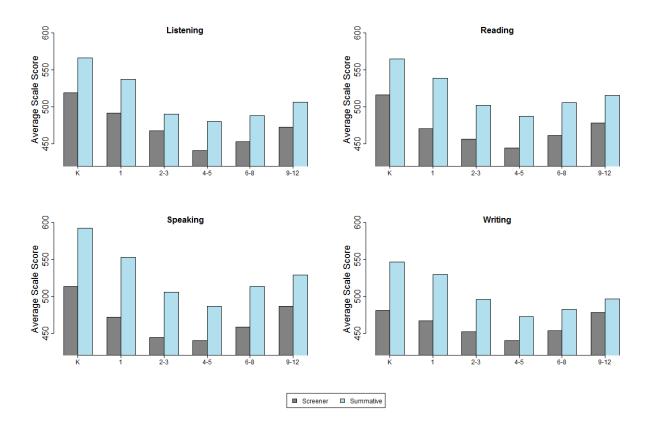


Figure 5.1 Average Domain Scale Score Progress

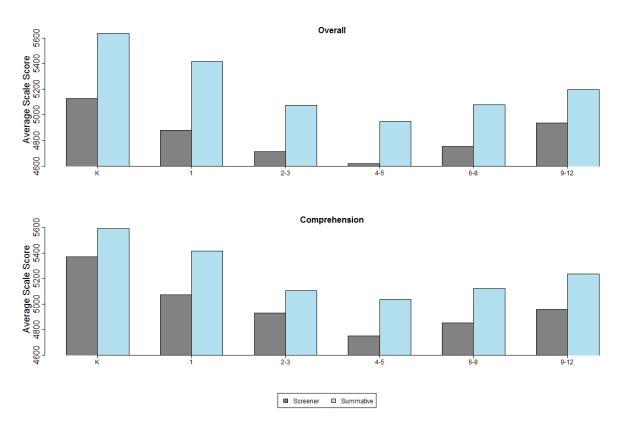


Figure 5.2 Average Overall and Comprehension Scale Score Progress

Figure 5.3 and Figure 5.4 display the percentage of students in each domain performance level and overall proficiency level, respectively. In each pair of bars, the left bar is from the screener test and the right bar is from the corresponding summative test. The plots indicate that more students are in higher domain performance levels and overall proficiency levels in the summative tests.

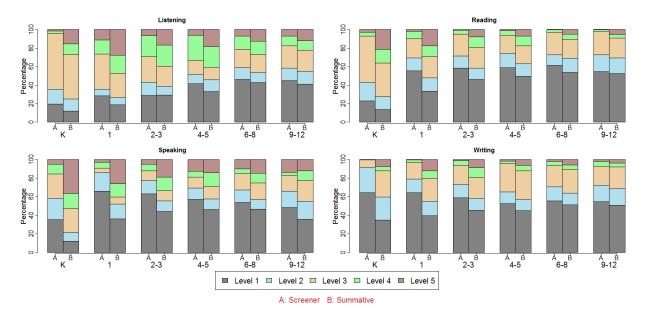
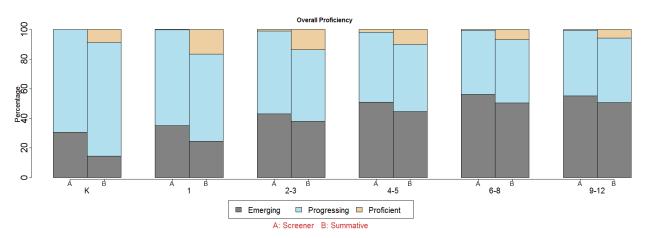




Figure 5.4 Percentages of Overall Proficiency from Screener to Summative



Chapter 6. Reporting

As with the summative tests, the screener test results are available in the Online Reporting System (ORS). The detailed introduction for the ORS can be found in Chapter 8 in Part I of the technical report. Figure 6.1 and Figure 6.2 show a sample page of an online score report and the individual student report for the 2019–2020 OELPS, respectively.

Figure 6.1 ORS Page for State Overall Performance

irtment ucation	C Demorte & Fil	*		* ^	*
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Based on data from the OELPS, 2019-2020 administration.

Report Generated: 7/15/2020 12:09:14 PM EDT

The number of students tested includes only those students with valid scores

*No valid scores for this grade and subject

Ohio Department of Education

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Figure 6.2 Individual Student Report

					Logged in as: Demo Use
rtment ucation			*		* *
Score Reports	Repo	rts & Files 🔻	State at a Glan		~
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ndividual Stu How did my stu Fest: Kindergarte Year: 2019-2020 Name: Demo Stud	udent perfo en OELPS		DELPS?		
Overall Performan	ce on the Kinderg	jarten OELPS Tes	t: Demo Student 1, 2019-202	0	
Name			SSID	Proficiency Status	Date Tested
Demo Stud	dent 1 🔾		YQ99999999	Progressing	9/5/2019
These students are al-				one domain score above Level 2 and	at least one domain score below Level 4.
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Section 1: Screener Assessment - Scale Score Summary

* Domains with Exemption are excluded.

* The statistics are suppressed when the N count is fewer than 10.

Cubana	Ctotus			Listening	, ,				Reading		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		9,559	314	524.0	714	67.3	9,560	318	520.5	708	66.5
	Female	4,330	314	526.7	714	68.4	4,332	318	523.8	708	66.7
Gender	Male	4,464	314	521.6	714	66.5	4,462	318	517.5	708	66.6
	Missing	765	314	522.4	714	65.5	766	318	519.6	708	63.9
	American Indian or Alaskan Native	24	363	506.2	630	75.2	24	365	508.2	633	68.6
	Asian	2,429	314	539.4	714	72.0	2,428	318	535.2	708	72.0
	Black or African American	1,729	314	526.6	714	62.4	1,729	318	522.4	708	62.3
Ethnicity	Hispanic or Latino	2,540	314	506.0	714	63.5	2,541	318	503.6	708	62.1
Lumony	Native Hawaiian or Other Pacific Islander	44	370	535.2	658	59.8	44	405	536.7	656	55.3
	Two or More Races	947	314	515.4	714	66.4	947	318	512.3	708	64.8
	White	1,619	314	529.3	714	66.2	1,620	318	525.6	708	65.6
	Other/Unknown	227	382	536.5	714	53.9	227	367	534.3	708	52.8
	Gifted	23	381	554.8	695	97.0	23	412	555.7	690	87.4
Other	IEP	119	314	484.6	592	65.2	120	318	484.0	597	64.3
	Migrant	9					9				
	Autism	32	343	467.3	560	58.9	32	336	464.2	567	62.2
	Developmental delay	5					5				
Primary Disability	Emotional disturbance	1					1				
	Hearing Impaired	2					3				
	Intellectual Disability	5					5				
	Multiple disabilities	6					6				

Table S1.1: Screener Scale Score Summary by Subgroup - Kindergarten

Subaroun	Statua		l	Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
	Orthopedic impairment	1	-	_		-	1	-			
	Other health impairment	6					6				
	Specific learning disability	7					7				
	Speech or language impairment	63	314	504.7	592	59.8	63	318	504.7	597	55.3

Subaraun	Status		ogroup	Speaking	Surveir (C				Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		9,557	339	517.4	711	82.2	9,560	347	486.5	684	62.
	Female	4,330	339	523.1	711	82.3	4,332	347	487.0	684	62.
Gender	Male	4,462	339	512.5	711	82.2	4,462	347	485.6	684	63.
	Missing	765	339	513.9	711	80.1	766	347	488.7	684	58.
	American Indian or Alaskan Native	24	368	515.8	669	77.6	24	365	485.4	640	65
	Asian	2,428	339	534.4	711	84.0	2,428	347	506.9	684	73
	Black or African American	1,729	339	525.6	711	72.4	1,729	347	485.4	684	60.
Ethnicity	Hispanic or Latino	2,539	339	492.4	711	81.3	2,541	347	469.4	684	49
	Native Hawaiian or Other Pacific Islander	44	365	529.1	687	74.1	44	421	488.6	606	45
	Two or More Races	947	339	505.4	711	83.4	947	347	476.3	684	58
	White	1,619	339	527.3	711	81.6	1,620	347	488.6	684	60
	Other/Unknown	227	367	530.3	711	73.8	227	396	494.8	684	53
	Gifted	23	450	566.7	698	75.1	23	379	572.3	674	74
Other	IEP	119	339	468.0	636	76.4	120	347	456.8	592	49.
	Migrant	9					9				
	Autism	32	348	439.3	596	69.8	32	356	434.9	555	46
	Developmental delay	5					5				
Primary Disability	Emotional disturbance	1					1				
······	Hearing Impaired	2					3				
	Intellectual Disability	5					5				
	Multiple disabilities	6					6			684 684 684 640 684 684 684 684 684 684 684 684 592	

Table S1.1: Screener Scale Score Summary by Subgroup - Kindergarten (cont.)

Subaroun	Statua		ę	Speaking					Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Orthopedic impairment	1			-		1	-	-	_	
	Other health impairment	6					6				
	Specific learning disability	7					7				
	Speech or language impairment	63	339	490.5	616	69.5	63	347	468.3	592	49.8

Qubara	C4-4-1		Con	nprehensio	on	,			Overall	Max 6763 6764 675322 67532 67532 67532	
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		9,562	3978	5394.1	6375	492.9	9,562	3646	5167.7	6763	529.5
	Female	4,332	3978	5416.0	6375	496.9	4,332	3646	5193.0	6763	530.1
Gender	Male	4,464	3978	5374.0	6375	489.1	4,464	3646	5144.4	6763	532.2
	Missing	766	3978	5387.0	6375	488.4	766	3646	5160.5	6763	504.0
	American Indian or Alaskan Native	24	4216	5258.6	6178	563.0	24	4033	5106.3	6114	522.4
	Asian	2,429	3978	5474.2	6375	499.4	2,429	3646	5309.5	6763	580.5
	Black or African American	1,729	3978	5414.6	6375	473.2	1,729	3646	5193.9	6763	479.0
Ethnicity	Hispanic or Latino	2,542	3978	5289.3	6375	492.5	2,542	3646	5006.1	6763	485.1
	Native Hawaiian or Other Pacific Islander	44	4359	5532.3	6375	464.2	44	4279	5252.9	6201	428.0
	Two or More Races	947	3978	5346.9	6375	494.1	947	3646	5084.9	6763	517.5
	White	1,620	3978	5427.0	6375	482.9	1,620	3646	5213.8	6763	516.4
	Other/Unknown	227	4234	5501.7	6375	406.0	227	4197	5267.4	6763	417.5
	Gifted	23	4279	5484.6	6375	653.1	23	4462	5600.0	6591	637.0
Other	IEP	120	3978	5138.6	6009	510.5	120	3646	4841.9	5695	489.3
	Migrant	9					9				
	Autism	32	4120	5019.3	6009	497.5	32	3748	4650.0	5322	444.7
	Developmental delay	5					5				
Primary Disability	Emotional disturbance	1					1				
	Hearing Impaired	3					3				
	Intellectual Disability	5					5				
	Multiple disabilities	6					6				

Table S1.1: Screener Scale Score Summary by Subgroup - Kindergarten (cont.)

Cubaroun	Status		Con	nprehensio	on				Overall		
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Orthopedic impairment	1	-				1	-			
	Other health impairment	6					6				
	Specific learning disability	7					7				
	Speech or language impairment	63	3978	5297.7	6009	462.7	63	3646	5002.1	5695	436.9

* Scale scores cannot be compared across grade bands.

Cubana	Status		- Si o up	Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		1,524	288	509.4	678	91.4	1,524	286	492.8	704	96.8
	Female	665	288	515.9	678	91.6	665	286	496.7	704	99.0
Gender	Male	722	288	502.5	678	91.8	722	286	488.6	704	95.3
	Missing	137	298	514.2	678	86.5	137	307	495.8	704	93.5
	American Indian or Alaskan Native	3					3				
	Asian	450	288	546.3	678	89.8	450	286	537.2	704	100.1
	Black or African American	263	288	515.9	678	80.7	263	286	498.5	704	89.1
Ethnicity	Hispanic or Latino	388	288	472.8	678	86.9	388	286	448.9	704	81.9
Luniony	Native Hawaiian or Other Pacific Islander	10	337	497.9	596	81.7	10	377		625	83.3
	Two or More Races	144	288	482.5	678	89.4	144	286	465.9	704	87.6
	White	248	288	510.9	678	86.9	248	286	492.5	704	90.7
	Other/Unknown	18	314	473.4	634	85.6	18	338	470.8	670	87.1
	Gifted	9					9				
Other	IEP	12	350	484.4	619	102.4	12	303	459.0	593	100.2
	Migrant	7					7				
	Autism	3					3				
	Emotional disturbance	1					1				
Primary Disability	Orthopedic impairment	1					1				
	Other health impairment	1					1			704 704 625 704 704 670	
	Specific learning disability	1					1				

Table S1.2: Screener Scale Score Summary by Subgroup - Grade 1

	Subgroup Status			Listening					Reading			
		Ν	Min	Mean	Мах	SD	N	Min	Mean	Max	SD	
		Speech or language impairment	5	_				5				

	Ototuo			Speaking	e (conta)				Writing		
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		1,524	310	491.5	669	102.6	1,524	283	489.0	698	98.
	Female	665	310	495.8	669	104.7	665	283	493.5	698	100.
Gender	Male	722	310	485.7	669	100.8	722	283	483.8	698	96.
	Missing	137	319	501.3	669	100.8	137	305	493.7	698	93.9
	American Indian or Alaskan Native	3					3				
	Asian	450	310	533.8	669	95.9	450	283	533.2	698	100.4
	Black or African American	263	310	501.9	669	88.0	263	283	491.7	698	89.7
Ethnicity	Hispanic or Latino	388	310	448.0	669	100.9	388	283	448.3	698	85.4
	Native Hawaiian or Other Pacific Islander	10	340	485.3	629	78.7	10	384	467.4	620	78.3
	Two or More Races	144	310	457.0	669	102.7	144	283	459.0	698	89.4
	White	248	310	495.6	669	99.3	248	283	490.1	698	93.
	Other/Unknown	18	335	440.8	652	94.0	18	345	451.7	669	81.2
	Gifted	9					9				
Other	IEP	12	317	455.5	575	91.9	12	300	465.0	600	105.0
	Migrant	7					7				
	Autism	3					3				
	Emotional disturbance	1					1				
Primary Disability	Orthopedic impairment	1					1				
	Other health impairment	1					1			698 698 620 698 698 669	
	Specific learning disability	1					1				

Table S1.2: Screener Scale Score Summary by Subgroup - Grade 1 (cont.)

Cubarous	Subgroup Status			Speaking			_		Writing		
Subgroup Status	Ν	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD	
	Speech or language impairment	5	_	-			5				

Cubana	<u>Ctatus</u>	<i>y ey 2</i>		nprehensio	on				Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,524	3785	5199.7	6387	631.9	1,524	3364	5050.7	6629	778.4
	Female	665	3785	5233.9	6387	637.7	665	3364	5091.1	6629	793.9
Gender	Male	722	3785	5165.1	6387	630.3	722	3364	5004.8	6629	768.6
	Missing	137	3785	5216.4	6387	605.6	137	3502	5096.9	6629	745.4
	American Indian or Alaskan Native	3					3				
	Asian	450	3785	5471.3	6387	634.8	450	3364	5398.4	6629	774.4
	Black or African American	263	3785	5263.7	6387	578.6	263	3364	5103.4	6629	684.8
Ethnicity	Hispanic or Latino	388	3785	4913.5	6387	558.3	388	3364	4708.4	6629	705.6
,	Native Hawaiian or Other Pacific Islander	10	4053	5033.4	5860	580.3	10	4090	4907.6	6060	622.0
	Two or More Races	144	3785	5030.1	6387	597.0	144	3364	4805.7	6629	740.6
	White	248	3785	5195.4	6387	590.4	248	3364	5065.6	6629	743.0
	Other/Unknown	18	3785	5071.1	6261	636.7	18	3852	4746.2	6363	696.6
	Gifted	9					9				
Other	IEP	12	4050	4973.6	5888	661.5	12	3575	4799.9	5894	795.0
	Migrant	7					7				
	Autism	3					3				
	Emotional disturbance	1					1				
Primary Disability	Orthopedic impairment	1					1				
	Other health impairment	1					1				
	Specific learning disability	1					1				

Table S1.2: Screener Scale Score Summary by Subgroup - Grade 1 (cont.)

Cubaroun	Status		Co	mprehensi	ion				Overall		
Subgroup Status	Status	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
	Speech or language impairment	5		-	-		5		-	_	

* Scale scores cannot be compared across grade bands.

Subaroun	Status			Listening			_		Reading		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		1,159	286	483.9	710	85.7	1,160	278	473.3	734	92.4
	Female	480	286	491.4	694	88.6	481	278	480.9	714	94.3
Gender	Male	595	286	477.2	710	83.6	595	278	466.4	734	90.5
	Missing	84	286	488.5	710	80.0	84	278	478.0	734	91.9
	American Indian or Alaskan Native	3					3				
	Asian	279	286	505.7	710	87.4	280	278	501.5	734	95.9
	Black or African American	223	286	501.8	710	80.5	223	278	489.6	734	88.1
Ethnicity	Hispanic or Latino	312	286	456.0	645	76.2	312	278	441.3	665	79.3
	Native Hawaiian or Other Pacific Islander	8					8				
	Two or More Races	125	286	461.4	656	82.7	125	278	447.0	663	86.2
	White	191	286	491.1	686	89.4	191	278	481.2	706	96.3
	Other/Unknown	18	356	479.2	670	98.9	18	350	476.6	700	104.7
	Gifted	19	408	568.3	640	65.0	19	430	565.7	641	58.5
Other	IEP	7					8				
	Migrant	1					1				
	Autism	1					1				
Deimone Dischillt	Hearing Impaired	0					1				
Primary Disability	Multiple disabilities	1					1				
cores cannot be compa	Speech or language impairment	4					4				

Table S1.3: Screener Scale Score Summary by Subgroup - Grade 2

Cub arround	<u>Ctatus</u>		sgi o up	Speaking	(conta)				Writing		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		1,159	292	464.9	703	104.4	1,160	276	469.0	737	94.8
	Female	480	292	473.6	691	106.1	481	276	476.7	721	97.8
Gender	Male	595	292	457.3	703	102.3	595	276	461.9	737	92.2
	Missing	84	292	468.8	703	106.8	84	276	474.9	737	93.1
	American Indian or Alaskan Native	3					3				
	Asian	279	292	485.3	703	106.7	280	276	499.7	737	97.9
	Black or African American	223	292	493.5	703	90.2	223	276	485.2	737	90.3
Ethnicity	Hispanic or Latino	312	292	430.5	659	99.4	312	276	435.2	651	81.0
	Native Hawaiian or Other Pacific Islander	8					8				
	Two or More Races	125	292	438.4	661	103.6	125	276	440.1	658	87.6
	White	191	292	475.7	685	106.5	191	276	477.9	712	99.3
	Other/Unknown	18	324	454.1	680	118.3	18	352	472.3	695	108.3
	Gifted	19	421	514.6	614	61.6	19	415	564.2	641	62.5
Other	IEP	7					8				
	Migrant	1					1				
	Autism	1					1				
	Hearing Impaired	0					1				
Primary Disability	Multiple disabilities	1					1				
	Speech or language impairment	4					4				

Table S1.3: Screener Scale Score Summary by Subgroup - Grade 2 (cont.)

Subaraun	Status		Con	nprehensio	on				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		1,160	3756	5040.9	6439	633.4	1,160	3326	4861.2	6880	752.8
	Female	481	3756	5092.8	6439	641.8	481	3326	4925.4	6747	772.4
Gender	Male	595	3756	4995.8	6439	629.6	595	3326	4803.8	6880	735.1
	Missing	84	3756	5062.0	6439	593.5	84	3326	4899.6	6880	739.2
	American Indian or Alaskan Native	3					3				
	Asian	280	3756	5203.9	6439	640.7	280	3326	5067.5	6880	771.7
	Black or African American	223	3756	5172.7	6439	612.3	223	3326	5025.5	6880	694.1
Ethnicity	Hispanic or Latino	312	3756	4834.4	6439	570.3	312	3326	4597.0	6325	666.4
	Native Hawaiian or Other Pacific Islander	8					8				
	Two or More Races	125	3756	4875.0	6329	608.7	125	3326	4648.9	6392	725.8
	White	191	3756	5087.0	6439	642.9	191	3326	4934.0	6665	782.3
	Other/Unknown	18	4102	5017.1	6329	708.7	18	3877	4832.3	6599	866.0
	Gifted	19	4565	5781.9	6439	450.8	19	4525	5508.4	6168	473.8
Other	IEP	8					8				
	Migrant	1					1				
	Autism	1					1				
	Hearing Impaired	1					1				
Primary Disability	Multiple disabilities	1					1				
	Speech or language impairment	4					4				

Table S1.3: Screener Scale Score Summary by Subgroup - Grade 2 (cont.)

* Scale scores cannot be compared across grade bands.

Subarous	Status		l si	Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		1,002	286	501.7	710	101.6	1,001	278	497.0	734	111.
	Female	440	286	511.6	710	103.5	439	278	507.2	734	113.9
Gender	Male	493	286	495.1	710	98.3	493	278	490.2	734	108.0
	Missing	69	321	486.2	691	108.2	69	321	480.6	726	115.9
	American Indian or Alaskan Native	2					2				
	Asian	225	286	543.7	710	102.6	225	278	547.8	734	111.
	Black or African American	201	286	496.2	691	101.8	201	278	493.8	726	109.0
Ethnicity	Hispanic or Latino	283	286	473.8	710	94.6	283	278	464.0	734	104.2
Linnony	Native Hawaiian or Other Pacific Islander	6					6				
	Two or More Races	132	286	482.2	710	91.7	131	278	467.3	734	100.0
	White	138	286	515.9	710	103.1	138	278	512.3	734	112.
	Other/Unknown	15	331	504.9	585	77.3	15	296	505.6	603	78.
	Gifted	3					3				
Other	IEP	7					6				
	Migrant	3					3				
	Autism	1					1				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	1					0				
	Other health impairment	3					3				
	Specific learning disability	1					1				

Table S1.4: Screener Scale Score Summary by Subgroup - Grade 3

Cubarous	Subgroup Status			Listening					Reading		
Subgroup		N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
	Speech or language impairment	2	-				2		-	_	

Subgroup	Status	· ·	ogi o up	Speaking	o (conta)				Writing	Max 737 737 737 737 737 737 737 737 609 737 609 737 </th <th></th>	
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		1,001	292	481.3	703	121.4	1,001	276	494.6	737	113.
	Female	439	292	491.2	703	123.2	439	276	505.5	737	116.
Gender	Male	493	292	474.4	703	117.8	493	276	487.0	737	109.
	Missing	69	310	468.1	698	131.0	69	310	478.9	730	118.
	American Indian or Alaskan Native	2					2				
	Asian	225	292	529.6	703	119.0	225	276	547.0	737	111.
	Black or African American	201	292	485.2	698	112.8	201	276	490.6	730	111.
Ethnicity	Hispanic or Latino	283	292	441.2	703	119.5	283	276	459.5	737	106.
	Native Hawaiian or Other Pacific Islander	6					6				
	Two or More Races	131	292	455.3	703	113.6	131	276	464.9	737	103.
	White	138	292	497.1	703	119.5	138	276	512.4	737	113.
	Other/Unknown	15	301	519.5	629	98.4	15	292	510.6	609	77.
	Gifted	3					3				
Other	IEP	6					6				
	Migrant	3					3				
	Autism	1					1				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	0					0				
	Other health impairment	3					3				
	Specific learning disability	1					1				

Table S1.4: Screener Scale Score Summary by Subgroup - Grade 3 (cont.)

Qubara	Subgroup Status -			Speaking					Writing		
Subgroup		N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
	Speech or language impairment	2	_	-			2				

Subarous	Status	· ·	Con	nprehensio	on				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		1,002	3756	5166.0	6439	729.0	1,002	3326	5031.1	6880	900.
	Female	440	3756	5228.8	6439	731.0	440	3326	5113.9	6880	920.
Gender	Male	493	3756	5130.0	6439	719.2	493	3326	4974.9	6880	869
	Missing	69	3852	5022.5	6439	757.5	69	3582	4905.2	6798	958
	American Indian or Alaskan Native	2					2				
	Asian	225	3756	5475.5	6439	717.1	225	3326	5428.8	6880	892
	Black or African American	201	3756	5148.7	6439	727.7	201	3326	5015.4	6798	871
Ethnicity	Hispanic or Latino	283	3756	4964.8	6439	692.7	283	3326	4751.4	6880	857
	Native Hawaiian or Other Pacific Islander	6					6				
	Two or More Races	132	3756	4995.4	6439	663.7	132	3326	4813.4	6880	815
	White	138	3756	5256.1	6439	734.7	138	3326	5160.3	6880	900
	Other/Unknown	15	3935	5155.2	5723	518.7	15	3476	5172.7	5917	658
	Gifted	3					3				
Other	IEP	7					7				
	Migrant	3					3				
	Autism	1					1				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	1					1				
	Other health impairment	3					3				
	Specific learning disability	1					1				

Table S1.4: Screener Scale Score Summary by Subgroup - Grade 3 (cont.)

Subarous	Status		Co	mprehensi	ion		Overall						
Subgroup	Subgroup Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD		
	Speech or language impairment	2					2		-	-	-		

* Scale scores cannot be compared across grade bands.

Subaroun	Statua		ا ا	Listening					Reading		
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
Total		829	270	494.0	778	119.0	829	270	496.1	795	117.3
	Female	379	270	505.3	762	118.7	379	270	505.2	773	115.9
Gender	Male	391	270	481.9	778	118.4	391	270	486.2	795	117.3
	Missing	59	304	500.7	712	118.4	59	305	503.5	729	122.8
	American Indian or Alaskan Native	4					4				
	Asian	181	270	549.5	778	113.3	182	270	547.2	795	117.0
	Black or African American	159	295	511.8	747	102.1	159	320	513.0	769	103.3
Ethnicity	Hispanic or Latino	242	270	452.9	762	109.3	242	270	457.6	773	103.6
Linnony	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	104	270	465.9	757	121.2	103	270	471.6	775	119.1
	White	121	270	492.6	753	130.4	121	270	494.7	766	129.9
	Other/Unknown	13	352	493.8	675	109.0	13	358	492.3	680	109.7
	Gifted	6					6				
Other	IEP	7					7				
	Migrant	3					3				
	Autism	1					0				
	Emotional disturbance	1					1				
Primary Disability	Hearing Impaired	0					1				
	Intellectual Disability	0					0				
	Multiple disabilities	1					1				

Table S1.5: Screener Scale Score Summary by Subgroup - Grade 4

Subaroun	Status			Listening			Reading						
Subgroup	Status -	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD		
	Orthopedic impairment	1		-			1		-				
	Other health impairment	1					1						
	Specific learning disability	2					2						
	Speech or language impairment	2					2						

Subaroup	Status	y ey eu		Speaking	r (conta)		Writing					
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD	
Total		828	270	504.0	786	151.3	829	268	496.0	797	125.7	
	Female	379	270	518.2	776	152.2	379	268	507.7	782	125.1	
Gender	Male	390	270	487.6	786	148.8	391	268	483.9	797	124.7	
	Missing	59	289	521.5	749	154.3	59	305	501.0	731	130.5	
	American Indian or Alaskan Native	4					4					
	Asian	181	270	568.4	786	141.3	182	268	553.2	797	121.3	
	Black or African American	159	288	534.8	772	129.2	159	303	514.5	776	110.8	
Ethnicity	Hispanic or Latino	242	270	450.7	776	143.9	242	268	453.4	782	113.0	
	Native Hawaiian or Other Pacific Islander	5					5					
	Two or More Races	103	270	467.6	773	159.5	103	268	467.3	770	127.8	
	White	121	270	504.4	747	159.5	121	268	495.9	772	138.6	
	Other/Unknown	13	306	489.1	687	131.0	13	348	488.7	688	110.7	
	Gifted	6					6					
Other	IEP	6					7					
	Migrant	3					3					
	Autism	0					0					
	Emotional disturbance	1					1					
Primary Disability	Hearing Impaired	0					1					
	Intellectual Disability	0					0					
	Multiple disabilities	1					1					

Table S1.5: Screener Scale Score Summary by Subgroup - Grade 4 (cont.)

Subaroun	Status			Speaking			Writing						
Subgroup	Status -	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD		
	Orthopedic impairment	1		-			1		-				
	Other health impairment	1					1						
	Specific learning disability	2					2						
	Speech or language impairment	2					2						

Subaroun	Status		Con	nprehensio	on		_		Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		830	3649	5056.0	6700	723.3	830	3237	5071.2	7401	1027.2
	Female	379	3649	5110.7	6588	712.5	379	3237	5165.2	7277	1025.8
Gender	Male	392	3649	4997.1	6700	731.6	392	3237	4969.4	7401	1017.
	Missing	59	3962	5095.9	6284	718.7	59	3521	5143.1	6891	1056.8
	American Indian or Alaskan Native	4					4				
	Asian	182	3649	5370.4	6700	680.8	182	3237	5535.2	7401	980.3
	Black or African American	159	3649	5173.0	6421	640.6	159	3483	5242.5	7208	886.2
Ethnicity	Hispanic or Latino	242	3649	4815.8	6700	663.1	242	3237	4714.5	7277	942.4
Lumony	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	104	3649	4898.3	6700	742.2	104	3237	4830.4	7242	1056.5
	White	121	3649	5028.8	6588	790.0	121	3237	5065.2	7149	1120.4
	Other/Unknown	13	4164	5114.8	6300	760.4	13	3793	5017.0	6511	911.0
	Gifted	6					6				
Other	IEP	8					8				
	Migrant	3					3				
	Autism	1					1				
	Emotional disturbance	1					1				
Primary Disability	Hearing Impaired	1					1				
	Intellectual Disability	0					0				
	Multiple disabilities	1					1				

Table S1.5: Screener Scale Score Summary by Subgroup - Grade 4 (cont.)

Cubarour	64-4-1		Co	mprehens	ion		Overall						
Subgroup	Status -	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD		
	Orthopedic impairment	1		-	-		1		-				
	Other health impairment	1					1						
	Specific learning disability	2					2						
	Speech or language impairment	2					2						

* Scale scores cannot be compared across grade bands.

Subaroun	Status –			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		834	270	507.2	772	125.0	834	270	510.4	786	124.2
	Female	363	270	510.9	772	129.0	363	270	513.1	786	128.
Gender	Male	418	270	504.7	772	122.3	418	270	508.0	786	121.3
	Missing	53	312	501.3	740	119.5	53	323	510.8	766	117.:
	American Indian or Alaskan Native	1					1				
	Asian	174	270	550.8	768	113.7	174	270	551.0	781	118.0
	Black or African American	169	270	508.5	745	120.0	169	270	508.8	755	121.1
Ethnicity	Hispanic or Latino	222	285	472.6	772	113.5	222	290	478.8	786	108.2
	Native Hawaiian or Other Pacific Islander	7					7				
	Two or More Races	109	270	508.5	772	133.0	109	270	514.0	786	128.
	White	145	270	509.1	772	137.3	145	270	511.4	786	139.9
	Other/Unknown	7					7				
	Gifted	8					8				
Other	IEP	6					6				
	Migrant	1					1				
	Developmental delay	0					0				
	Emotional disturbance	2					2				
Primary Disability	Intellectual Disability	0					0				
	Multiple disabilities	1					1				
	Other health impairment	1					1				

Table S1.6: Screener Scale Score Summary by Subgroup - Grade 5

Cub arround	Subgroup Status			Listening			_		Reading		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
	Specific learning disability	2	-				2		-		

	Status -			Speaking	o (conta)				Writing	Max 791 791 791 772 787 763 791 793 794 795 791 700 700 700 700 700 700 700 7	
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
Total		834	270	516.2	782	151.1	834	268	511.0	791	130.
	Female	363	270	517.6	782	154.9	363	268	515.2	791	134.3
Gender	Male	418	270	515.0	782	148.2	418	268	507.9	791	128.0
	Missing	53	293	515.2	770	150.3	53	314	506.7	772	126.0
	American Indian or Alaskan Native	1					1				
	Asian	174	270	560.4	780	142.0	174	268	553.3	787	122.8
	Black or African American	169	270	527.0	765	138.4	169	268	511.1	763	126.3
Ethnicity	Hispanic or Latino	222	281	471.0	782	147.2	222	289	474.7	791	116.4
Limitity	Native Hawaiian or Other Pacific Islander	7					7				
	Two or More Races	109	270	517.6	782	156.9	109	268	512.5	791	137.3
	White	145	270	519.8	782	160.4	145	268	516.9	791	143.6
	Other/Unknown	7					7				
	Gifted	8					8				
Other	IEP	6					6				
	Migrant	1					1				
	Developmental delay	0					0				
	Emotional disturbance	2					2				
Primary Disability	Intellectual Disability	0					0				
	Multiple disabilities	1					1				
	Other health impairment	1					1				

Table S1.6: Screener Scale Score Summary by Subgroup - Grade 5 (cont.)

Cub arround	Subgroup Status			Speaking					Writing		
Subgroup Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD	
	Specific learning disability	2	_	_			2		-		

Subaraus	Status		Con	nprehensio	on				Overall		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		834	3649	5144.2	6700	771.4	834	3237	5181.6	7352	1060.4
	Female	363	3649	5158.4	6700	792.7	363	3237	5205.5	7352	1091.6
Gender	Male	418	3649	5133.6	6700	760.1	418	3237	5163.6	7352	1038.8
	Missing	53	4034	5130.5	6415	722.0	53	3591	5160.3	7186	1028.2
	American Indian or Alaskan Native	1					1				
	Asian	174	3649	5418.4	6627	698.7	174	3237	5528.7	7323	985.9
	Black or African American	169	3649	5144.6	6700	755.0	169	3237	5203.7	7141	1010.5
Ethnicity	Hispanic or Latino	222	3809	4952.4	6627	698.5	222	3383	4882.8	7352	971.8
	Native Hawaiian or Other Pacific Islander	7					7				
	Two or More Races	109	3649	5169.4	6627	814.8	109	3237	5196.0	7352	1111.5
	White	145	3649	5115.6	6700	853.9	145	3237	5206.1	7352	1161.9
	Other/Unknown	7					7				
	Gifted	8					8				
Other	IEP	6					6				
	Migrant	1					1				
	Developmental delay	0					0				
	Emotional disturbance	2					2				
Primary Disability	Intellectual Disability	0					0				
	Multiple disabilities	1					1				
	Other health impairment	1					1				

Table S1.6: Screener Scale Score Summary by Subgroup - Grade 5 (cont.)

Subarous	Subgroup Status		Co	mprehensi	ion				Overall		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
	Specific learning disability	2					2		-		

* Scale scores cannot be compared across grade bands.

Cubaroun	Status			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		675	279	507.4	738	113.2	675	296	511.6	733	109.0
	Female	298	279	518.1	738	116.2	298	296	521.9	733	111.0
Gender	Male	322	279	500.5	738	110.3	322	296	505.1	733	107.2
	Missing	55	306	489.9	715	110.1	55	312	494.3	712	105.3
	American Indian or Alaskan Native	4					4				
	Asian	125	330	566.0	738	112.7	125	334	570.0	733	111.5
	Black or African American	147	279	507.5	738	104.8	147	296	511.4	733	102.4
Ethnicity	Hispanic or Latino	230	305	476.9	738	103.8	230	312	481.0	733	97.5
Linnony	Native Hawaiian or Other Pacific Islander	2					2				
	Two or More Races	54	279	479.2	696	106.9	54	296	484.9	697	102.5
	White	104	279	520.8	738	121.5	104	296	524.5	733	114.7
	Other/Unknown	9					9				
	Gifted	4					4				
Other	IEP	5					5				
	Migrant	4					4				
	Autism	1					1				
	Intellectual Disability	1					1				
Primary Disability	Other health impairment	0					0				
4 h-	Specific learning disability	3					3				

Table S1.7: Screener Scale Score Summary by Subgroup - Grade 6

Cubana	<u>Ctatus</u>		, si cup	Speaking	e (contra)				Writing		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		675	296	518.6	732	125.7	675	281	507.6	741	115.4
	Female	298	296	529.0	732	128.7	298	281	518.2	741	118.7
Gender	Male	322	296	512.5	732	123.4	322	281	500.2	741	112.2
	Missing	55	305	497.6	703	119.7	55	297	493.6	721	112.6
	American Indian or Alaskan Native	4					4				
	Asian	125	326	579.4	732	118.0	125	319	568.6	741	118.9
	Black or African American	147	296	529.2	732	112.5	147	281	506.8	741	107.7
Ethnicity	Hispanic or Latino	230	305	479.6	732	122.9	230	297	474.6	741	103.3
Lumony	Native Hawaiian or Other Pacific Islander	2					2				
	Two or More Races	54	296	488.2	711	123.8	54	281	480.4	705	107.1
	White	104	296	533.7	732	129.8	104	281	525.2	741	121.6
	Other/Unknown	9					9				
	Gifted	4					4				
Other	IEP	5					5				
	Migrant	4					4				
	Autism	1					1				
	Intellectual Disability	1					1				
Primary Disability	Other health impairment	0					0				
	Specific learning disability	3					3				

Table S1.7: Screener Scale Score Summary by Subgroup - Grade 6 (cont.)

Cubana	Ctotus.		Con	nprehensio	on				Overall		
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		675	3803	5181.1	6476	721.8	675	3388	5188.2	6974	921.7
	Female	298	3803	5245.2	6476	727.3	298	3388	5272.9	6974	945.3
Gender	Male	322	3803	5142.2	6476	716.5	322	3388	5134.6	6974	900.6
	Missing	55	3938	5061.6	6476	703.6	55	3507	5042.7	6715	887.8
	American Indian or Alaskan Native	4					4				
	Asian	125	4014	5537.0	6476	703.2	125	3794	5666.6	6974	915.2
	Black or African American	147	3803	5183.6	6476	683.3	147	3388	5209.0	6974	846.1
Ethnicity	Hispanic or Latino	230	3803	5000.5	6476	679.3	230	3499	4919.2	6974	854.7
Lumony	Native Hawaiian or Other Pacific Islander	2					2				
	Two or More Races	54	3803	5009.0	6380	706.2	54	3388	4960.3	6695	873.9
	White	104	3803	5238.7	6476	742.4	104	3388	5309.4	6974	968.7
	Other/Unknown	9					9				
	Gifted	4					4				
Other	IEP	5					5				
	Migrant	4					4				
	Autism	1					1				
	Intellectual Disability	1					1				
Primary Disability	Other health impairment	0					0				
	Specific learning disability	3					3				

Table S1.7: Screener Scale Score Summary by Subgroup - Grade 6 (cont.)

* Scale scores cannot be compared across grade bands.

Subaroun	Status			Listening					Reading		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		673	279	502.5	738	119.1	673	296	508.9	733	115.
	Female	317	279	511.5	738	119.2	317	296	517.0	733	116.
Gender	Male	318	279	491.6	738	117.6	318	296	499.4	733	113.
	Missing	38	344	518.5	738	125.1	38	338	521.1	733	125.
	American Indian or Alaskan Native	0					0				
	Asian	121	279	558.7	738	116.5	121	296	566.9	733	113.
	Black or African American	137	296	518.9	738	112.9	137	322	520.2	733	109.
Ethnicity	Hispanic or Latino	222	279	464.0	738	110.4	222	296	471.2	733	107.
Lumony	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	85	279	483.7	738	121.1	85	296	493.7	733	116.
	White	99	324	519.3	738	116.3	99	328	524.2	733	114.
	Other/Unknown	4					4				
	Gifted	1					1				
Other	IEP	7					7				
	Migrant	3					3				
	Autism	1					1				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	0					0				
	Other health impairment	2					2				
	Specific learning disability	3					3				

Table S1.8: Screener Scale Score Summary by Subgroup - Grade 7

Subarous	Status			Listening					Reading		
Subgroup Stat	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
	Visual impairment	0					0				

	Status -			Speaking	(conta)				Writing		
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		673	296	507.4	732	132.5	673	281	504.7	741	121.
	Female	317	296	518.9	732	132.3	317	281	514.2	741	122.
Gender	Male	318	296	493.7	732	131.5	318	281	494.1	741	119.:
	Missing	38	319	526.1	732	134.8	38	323	514.8	741	126.9
	American Indian or Alaskan Native	0					0				
	Asian	121	296	572.0	732	121.0	121	281	564.3	741	117.
	Black or African American	137	307	536.6	732	116.5	137	300	521.9	741	114.2
Ethnicity	Hispanic or Latino	222	296	457.6	732	127.2	222	281	463.6	741	113.:
Lumony	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	85	296	479.7	732	138.7	85	281	483.3	741	121.2
	White	99	330	530.1	732	128.1	99	313	523.9	741	119.9
	Other/Unknown	4					4				
	Gifted	1					1				
Other	IEP	7					7				
	Migrant	3					3				
	Autism	1					1				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	0					0				
	Other health impairment	2					2				
	Specific learning disability	3					3				

Table S1.8: Screener Scale Score Summary by Subgroup - Grade 7 (cont.)

Subaroun	Status			Speaking					Writing		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Max	SD
	Visual impairment	0		-			0				

Subarous	Status		Con	nprehensio	on				Overall	Max 6974 <tr< th=""><th></th></tr<>	
Subgroup	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
Total		673	3803	5151.3	6476	759.6	673	3388	5142.3	6974	974.
	Female	317	3803	5198.5	6476	748.5	317	3388	5219.5	6974	976
Gender	Male	318	3803	5091.0	6476	760.7	318	3388	5051.5	6974	961
	Missing	38	4167	5262.5	6476	820.2	38	3702	5258.4	6974	1026
	American Indian or Alaskan Native	0					0				
	Asian	121	3803	5511.6	6476	726.5	121	3388	5623.3	6974	924
	Black or African American	137	3978	5233.0	6476	729.5	137	3554	5294.2	6974	901
Ethnicity	Hispanic or Latino	222	3803	4911.6	6476	709.6	222	3388	4803.0	6974	914
Lumony	Native Hawaiian or Other Pacific Islander	5					5				
	Two or More Races	85	3803	5066.4	6476	788.1	85	3388	4975.1	6974	995
	White	99	3999	5233.0	6476	728.6	99	3697	5293.0	6974	954
	Other/Unknown	4					4				
	Gifted	1					1				
Other	IEP	7					7				
	Migrant	3					3				
	Autism	1					1				
	Intellectual Disability	1					1				
Primary Disability	Multiple disabilities	0					0				
	Other health impairment	2					2				
	Specific learning disability	3					3				

Table S1.8: Screener Scale Score Summary by Subgroup - Grade 7 (cont.)

Subarous	Status		Co	mprehensi	ion				Overall		
Subgroup St	Status	N	Min	Mean	Max	SD	N	Min	Mean	Max	SD
	Visual impairment	0					0				

* Scale scores cannot be compared across grade bands.

Cult area un	Ctatura	, ., .,		_istening					Reading		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		577	279	502.0	738	114.0	577	296	510.7	733	109.2
	Female	254	279	508.4	738	113.1	254	296	515.0	733	108.4
Gender	Male	285	279	494.1	738	114.7	285	296	504.4	733	110.2
	Missing	38	370	518.8	738	113.7	38	359	529.9	733	106.1
	American Indian or Alaskan Native	1					1				
	Asian	102	381	548.6	738	109.8	102	377	553.6	733	107.8
	Black or African American	110	279	519.3	722	103.2	110	296	528.2	723	96.0
Ethnicity	Hispanic or Latino	190	279	474.5	717	110.0	190	296	486.1	710	105.3
,	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	75	279	476.0	693	117.9	75	296	486.8	695	114.2
	White	91	279	514.5	738	118.9	91	296	519.2	733	114.7
	Other/Unknown	5					5				
	Gifted	2					2				
Other	IEP	7					7				
	Migrant	3					3				
	Autism	0					0				
Primary Disability	Other health impairment	4					4				
	Specific learning disability	3					3				

Table S1.9: Screener Scale Score Summary by Subgroup - Grade 8

Subaroun	Status	y cy zw	sgi oup	Speaking	, (conta)				Writing		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		577	296	510.0	732	128.5	577	281	506.2	741	116.3
	Female	254	296	518.6	732	125.0	254	281	512.7	741	115.0
Gender	Male	285	296	498.6	732	131.8	285	281	498.9	741	118.2
	Missing	38	338	537.5	732	120.1	38	360	517.3	741	109.6
	American Indian or Alaskan Native	1					1				
	Asian	102	346	567.7	732	111.8	102	384	553.8	741	112.6
	Black or African American	110	296	537.2	725	112.1	110	281	527.7	731	102.0
Ethnicity	Hispanic or Latino	190	296	472.9	720	128.1	190	281	476.6	722	112.2
,	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	75	296	477.7	709	140.9	75	281	480.1	704	121.7
	White	91	296	523.9	732	124.8	91	281	516.6	741	121.3
	Other/Unknown	5					5				
	Gifted	2					2				
Other	IEP	7					7				
	Migrant	3					3				
	Autism	0					0				
Primary Disability	Other health impairment	4					4				
	Specific learning disability	3					3				

Table S1.9: Screener Scale Score Summary by Subgroup - Grade 8 (cont.)

Subaroup	Statua	<i>y • y ~ </i>		nprehensio	on				Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		577	3803	5155.0	6476	725.0	577	3388	5154.6	6974	932.3
	Female	254	3803	5186.9	6476	724.1	254	3388	5206.3	6974	918.4
Gender	Male	285	3803	5106.5	6476	721.7	285	3388	5087.4	6974	946.7
	Missing	38	4222	5306.0	6476	742.0	38	3991	5312.8	6974	897.0
	American Indian or Alaskan Native	1					1				
	Asian	102	4310	5424.0	6476	689.3	102	4199	5547.0	6974	872.1
	Black or African American	110	3803	5270.3	6476	670.6	110	3388	5328.8	6889	815.7
Ethnicity	Hispanic or Latino	190	3803	5001.3	6476	710.8	190	3388	4913.8	6816	912.9
Lumony	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	75	3803	4986.5	6380	752.4	75	3388	4932.1	6679	992.1
	White	91	3803	5218.0	6476	744.5	91	3388	5244.9	6974	953.0
	Other/Unknown	5					5				
	Gifted	2					2				
Other	IEP	7					7				
	Migrant	3					3				
	Autism	0					0				
Primary Disability	Other health impairment	4					4				
	Specific learning disability	3					3				

Table S1.9: Screener Scale Score Summary by Subgroup - Grade 8 (cont.)

* Scale scores cannot be compared across grade bands.

	04-41-5			Listening					Reading		
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		1,042	297	482.1	731	109.9	1,042	309	487.1	733	105.4
	Female	426	297	485.3	731	108.7	426	309	491.1	733	104.3
Gender	Male	550	297	477.8	731	109.5	550	309	482.4	733	104.9
	Missing	66	297	497.7	731	120.4	66	309	500.0	733	116.0
	American Indian or Alaskan Native	1					1				
	Asian	148	297	540.3	731	106.3	148	309	546.7	733	103.0
	Black or African American	222	297	499.4	723	95.2	222	309	502.7	722	90.8
Ethnicity	Hispanic or Latino	402	297	443.6	731	102.8	402	309	449.9	733	98.4
	Native Hawaiian or Other Pacific Islander	10	297	411.0	586	93.2	10	309	421.4	610	95.4
	Two or More Races	133	297	459.3	723	107.9	133	309	464.5	722	102.3
	White	105	297	531.1	731	106.5	105	309	533.0	733	101.4
	Other/Unknown	21	315	555.3	701	105.3	21	327	554.2	699	101.1
	Gifted	0					0				
Other	IEP	8					8				
	Migrant	4					4				
	Intellectual Disability	1					1				
	Multiple disabilities	1					1				
Primary Disability	Specific learning disability	6					6				
coros cannot ho compa	Speech or language impairment	1					1				

Table S1.10: Screener Scale Score Summary by Subgroup - Grade 9

0			iogi oup	Speaking	(conta				Writing	Max 732 733 734 735 735 736 737 738 739 739 731 732 733 734 735 735 736 737 738 739 739 </th <th></th>	
Subgroup	Status —	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		1,042	332	494.2	722	119.1	1,042	315	487.9	732	105.
	Female	426	332	498.1	722	116.1	426	315	491.2	732	104.6
Gender	Male	550	332	489.7	722	120.0	550	315	483.4	732	104.8
	Missing	66	332	506.1	722	129.7	66	315	503.0	732	116.0
	American Indian or Alaskan Native	1					1				
	Asian	148	332	563.5	722	107.4	148	315	545.0	732	101.8
	Black or African American	222	332	522.1	718	102.6	222	315	504.0	726	92.5
Ethnicity	Hispanic or Latino	402	332	445.2	722	110.4	402	315	450.4	732	96.4
Ethnicity	Native Hawaiian or Other Pacific Islander	10	332	431.3	606	108.7	10	315	419.1	597	92.0
	Two or More Races	133	332	467.9	718	116.9	133	315	467.1	726	104.9
	White	105	332	549.3	722	111.6	105	315	535.3	732	105.8
	Other/Unknown	21	342	562.9	672	104.4	21	353	557.2	707	101.0
	Gifted	0					0				
Other	IEP	8					8				
	Migrant	4					4				
	Intellectual Disability	1					1				
	Multiple disabilities	1					1				
Primary Disability	Specific learning disability	6					6				
	Speech or language impairment	1					1				

Table S1.10: Screener Scale Score Summary by Subgroup - Grade 9 (cont.)

Cubanaua	<u>Ctatus</u>		Con	nprehensio	on				Overall		
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		1,042	3787	5012.1	6524	725.2	1,042	3605	4999.5	6923	878.2
	Female	426	3787	5037.5	6524	721.0	426	3605	5029.1	6923	863.0
Gender	Male	550	3787	4981.4	6524	719.8	550	3605	4963.5	6923	878.9
	Missing	66	3787	5105.1	6524	792.1	66	3605	5108.0	6923	963.6
	American Indian or Alaskan Native	1					1				
	Asian	148	3787	5404.5	6524	700.4	148	3605	5499.4	6923	830.1
	Black or African American	222	3787	5117.9	6524	624.1	222	3605	5158.4	6869	759.9
Ethnicity	Hispanic or Latino	402	3787	4765.9	6524	693.2	402	3605	4667.3	6923	811.3
	Native Hawaiian or Other Pacific Islander	10	3787	4553.5	5790	626.9	10	3605	4452.9	5912	783.3
	Two or More Races	133	3787	4850.9	6524	694.3	133	3605	4811.4	6869	860.5
	White	105	3787	5320.6	6524	680.4	105	3605	5401.1	6923	846.8
	Other/Unknown	21	3787	5503.8	6446	724.7	21	3785	5563.0	6618	814.3
	Gifted	0					0				
Other	IEP	8					8				
	Migrant	4					4				
	Intellectual Disability	1					1				
	Multiple disabilities	1					1				
Primary Disability	Specific learning disability	6					6				
	Speech or language impairment	1					1				

Table S1.10: Screener Scale Score Summary by Subgroup - Grade 9 (cont.)

* Scale scores cannot be compared across grade bands.

Cubana	<u>Ctatus</u>			Listening					Reading		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		611	297	513.8	731	105.1	611	309	518.5	733	101.1
	Female	268	297	517.6	731	102.5	268	309	522.1	733	98.5
Gender	Male	294	297	513.5	731	106.4	294	309	517.8	733	102.2
	Missing	49	297	494.4	700	111.0	49	309	503.5	708	109.0
	American Indian or Alaskan Native	2					2				
	Asian	104	369	554.6	731	93.9	104	374	557.2	733	93.3
	Black or African American	143	297	536.9	731	95.4	143	309	540.4	733	92.9
Ethnicity	Hispanic or Latino	175	297	469.9	731	102.8	175	309	478.1	733	98.3
Linnony	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	88	297	493.8	723	106.1	88	309	500.4	722	97.7
	White	85	353	528.6	723	100.4	85	352	529.1	722	99.9
	Other/Unknown	11	421	599.7	676	99.1	11	419	598.6	678	100.2
Other	IEP	3					3				
	Developmental delay	0					0				
	Emotional disturbance	1					1				
Primary Disability	Intellectual Disability	0					0				
	Other health impairment	1					1				
	Specific learning disability	2					2				

Table S1.11: Screener Scale Score Summary by Subgroup - Grade 10

0	04-4		iogi oup	Speaking	10 (000	,			Writing		
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		611	332	526.9	722	109.8	611	315	519.0	732	101.2
	Female	268	332	533.0	722	108.2	268	315	523.7	732	98.5
Gender	Male	294	332	523.0	722	109.8	294	315	517.5	732	102.6
	Missing	49	332	517.0	710	118.2	49	315	503.0	710	108.0
	American Indian or Alaskan Native	2					2				
	Asian	104	361	569.4	722	98.6	104	392	554.7	732	92.6
	Black or African American	143	332	558.0	722	94.9	143	315	543.6	732	94.0
Ethnicity	Hispanic or Latino	175	332	473.5	722	110.8	175	315	478.6	732	97.2
Lumony	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	88	332	508.9	718	105.9	88	315	500.9	726	102.4
	White	85	355	546.7	718	102.7	85	361	529.9	726	98.3
	Other/Unknown	11	451	584.9	698	83.3	11	415	596.8	680	98.2
Other	IEP	3					3				
	Developmental delay	0					0				
	Emotional disturbance	1					1				
Primary Disability	Intellectual Disability	0					0				
	Other health impairment	1					1				
	Specific learning disability	2					2				

Table S1.11: Screener Scale Score Summary by Subgroup - Grade 10 (cont.)

Cubara	Ctotus		Cor	nprehensio	on	,			Overall		
Subgroup	Status –	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		611	3787	5228.9	6524	704.7	611	3605	5257.8	6923	826.4
	Female	268	3787	5251.4	6524	692.2	268	3605	5295.9	6923	806.9
Gender	Male	294	3787	5231.4	6524	711.9	294	3605	5242.8	6923	833.2
	Missing	49	3787	5090.7	6303	727.4	49	3605	5139.1	6747	892.4
	American Indian or Alaskan Native	2					2				
	Asian	104	4224	5506.0	6524	638.0	104	4083	5575.2	6923	746.0
	Black or African American	143	3787	5370.0	6524	635.8	143	3605	5464.0	6923	742.8
Ethnicity	Hispanic or Latino	175	3787	4942.9	6524	689.5	175	3605	4898.1	6923	814.2
Lumony	Native Hawaiian or Other Pacific Islander	3					3				
	Two or More Races	88	3787	5099.5	6524	705.2	88	3605	5107.0	6869	810.7
	White	85	4127	5317.3	6524	678.6	85	3942	5370.6	6869	796.0
	Other/Unknown	11	4571	5857.2	6524	720.6	11	4500	5848.9	6544	752.1
Other	IEP	3					3				
	Developmental delay	0					0				
	Emotional disturbance	1					1				
Primary Disability	Intellectual Disability	0					0				
	Other health impairment	1					1				
	Specific learning disability	2					2				

Table S1.11: Screener Scale Score Summary by Subgroup - Grade 10 (cont.)

* Scale scores cannot be compared across grade bands.

Cubarroun				Listening					Reading		
Subgroup	Status —	N	Min	Mean	Max	SD	N	Min	Mean	Мах	SD
Total		388	297	539.2	731	108.1	388	309	542.5	733	102.6
	Female	186	297	532.0	731	110.5	186	309	535.5	733	104.9
Gender	Male	167	297	546.4	731	106.7	167	309	549.7	733	101.3
	Missing	35	388	543.5	723	102.1	35	394	545.7	722	97.0
	Asian	71	297	568.0	731	102.4	71	309	572.4	733	97.4
	Black or African American	88	297	531.6	731	89.2	88	309	536.8	733	80.5
	Hispanic or Latino	124	297	503.9	731	117.3	124	309	507.1	733	112.1
Ethnicity	Native Hawaiian or Other Pacific Islander	1					1				
	Two or More Races	22	369	539.0	711	119.5	22	377	540.5	705	110.3
	White	72	353	576.8	731	101.9	72	385	578.7	733	97.4
	Other/Unknown	10	467	573.3	672	63.2	10	482	568.9	671	71.2
Other	IEP	2					2				
	Intellectual Disability	1					1				
Primary Disability	Other health impairment	1					1				
	Specific learning disability	1					1				

Table S1.12: Screener Scale Score Summary by Subgroup - Grade 11

Quibarrour	C 4-4		, sing i o np	Speaking	11 (000				Writing		
Subgroup	Status —	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		388	332	555.6	722	110.0	388	315	543.6	732	104.7
	Female	186	332	549.3	722	113.1	186	315	537.4	732	107.2
Gender	Male	167	332	560.8	722	109.0	167	315	549.6	732	103.0
	Missing	35	373	564.9	718	97.9	35	398	548.2	726	100.5
	Asian	71	332	586.9	722	96.8	71	315	573.7	732	98.1
	Black or African American	88	332	558.0	722	88.6	88	315	537.5	732	87.0
	Hispanic or Latino	124	332	514.8	722	122.5	124	315	508.9	732	113.9
Ethnicity	Native Hawaiian or Other Pacific Islander	1					1				
	Two or More Races	22	362	555.4	713	129.8	22	378	546.5	716	117.3
	White	72	363	587.7	722	100.6	72	387	579.0	732	98.2
	Other/Unknown	10	443	591.7	686	81.6	10	473	559.1	664	57.4
Other	IEP	2					2				
	Intellectual Disability	1					1				
Primary Disability	Other health impairment	1					1				
	Specific learning disability	1					1				

Table S1.12: Screener Scale Score Summary by Subgroup - Grade 11 (cont.)

0	0 4-4		Con	nprehensio	on	,			Overall		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		388	3787	5384.3	6524	703.8	388	3605	5466.1	6923	843.1
	Female	186	3787	5329.5	6524	718.2	186	3605	5413.4	6923	864.4
Gender	Male	167	3787	5441.8	6524	696.4	167	3605	5516.1	6923	832.7
	Missing	35	4278	5400.9	6524	655.5	35	4221	5507.7	6869	781.3
	Asian	71	3787	5576.0	6524	662.9	71	3605	5710.0	6923	774.2
	Black or African American	88	3787	5340.4	6524	565.1	88	3605	5434.7	6923	680.1
	Hispanic or Latino	124	3787	5144.3	6524	770.4	124	3605	5167.3	6923	928.1
Ethnicity	Native Hawaiian or Other Pacific Islander	1					1				
	Two or More Races	22	4238	5337.4	6336	720.1	22	4087	5468.7	6791	953.2
	White	72	4240	5637.7	6524	661.7	72	4167	5749.1	6923	782.4
	Other/Unknown	10	5023	5693.8	6404	528.1	10	4854	5706.2	6441	533.5
Other	IEP	2					2				
	Intellectual Disability	1					1				
Primary Disability	Other health impairment	1					1				
orrog connot be compar	Specific learning disability	1					1				

Table S1.12: Screener Scale Score Summary by Subgroup - Grade 11 (cont.)

* Scale scores cannot be compared across grade bands.

Cubarour	<u>Ctotus</u>			Listening					Reading		
Subgroup	Status	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		230	297	553.7	731	102.6	230	309	557.7	733	98.9
	Female	112	332	558.8	731	90.7	112	333	564.3	733	86.2
Gender	Male	102	297	552.0	731	114.9	102	309	556.2	733	111.2
	Missing	16	361	528.6	661	100.1	16	351	521.0	658	97.1
	Asian	45	361	593.0	731	84.5	45	351	594.6	733	85.4
	Black or African American	49	393	539.2	731	88.5	49	389	552.1	733	85.5
	Hispanic or Latino	64	297	499.6	731	117.9	64	309	504.7	733	114.5
Ethnicity	Native Hawaiian or Other Pacific Islander	2					2				
	Two or More Races	12	520	637.0	731	70.9	12	543	640.1	733	64.2
	White	46	371	575.3	723	85.7	46	376	572.7	722	81.9
	Other/Unknown	12	477	584.1	690	74.2	12	496	580.1	692	64.3
Other	IEP	3					3				
Brimory Diochillity	Other health impairment	1					1				
Primary Disability	Specific learning disability	1					1				

Table S1.13: Screener Scale Score Summary by Subgroup - Grade 12

0k	04-4		;	Speaking					Writing		
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		230	332	570.9	722	101.8	230	315	555.8	732	100
	Female	112	345	575.9	722	89.7	112	341	562.6	732	87
Gender	Male	102	332	568.0	722	113.4	102	315	551.7	732	112
	Missing	16	355	554.7	693	107.3	16	361	533.7	666	106
	Asian	45	355	607.8	722	76.7	45	361	592.2	732	84
	Black or African American	49	380	564.3	722	85.6	49	394	544.1	732	85
	Hispanic or Latino	64	332	517.8	722	118.9	64	315	503.9	732	114
Ethnicity	Native Hawaiian or Other Pacific Islander	2					2				
	Two or More Races	12	506	660.0	722	74.8	12	514	647.2	732	68
	White	46	361	583.2	718	93.4	46	373	569.4	726	86
	Other/Unknown	12	476	595.8	691	66.9	12	504	593.3	699	73
Other	IEP	3					3				
	Other health impairment	1					1				
Primary Disability	Specific learning disability	1					1				

Table S1.13: Screener Scale Score Summary by Subgroup - Grade 12 (cont.)

0	04-4		Con	nprehensio	on				Overall		
Subgroup	Status –	N	Min	Mean	Мах	SD	N	Min	Mean	Мах	SD
Total		230	3787	5502.2	6524	682.5	230	3605	5580.2	6923	795.6
	Female	112	4008	5545.9	6524	610.9	112	3771	5629.6	6923	686.3
Gender	Male	102	3787	5494.1	6524	758.8	102	3605	5557.6	6923	898.5
	Missing	16	4174	5247.7	6081	624.8	16	3908	5378.8	6462	823.6
	Asian	45	4174	5778.8	6524	594.2	45	3908	5882.6	6923	641.6
	Black or African American	49	4342	5436.3	6524	603.2	49	4351	5504.5	6923	675.0
	Hispanic or Latino	64	3787	5129.3	6524	780.6	64	3605	5151.8	6923	921.8
Ethnicity	Native Hawaiian or Other Pacific Islander	2					2				
	Two or More Races	12	5456	5956.9	6524	383.6	12	5248	6277.6	6923	535.2
	White	46	4288	5658.2	6524	564.4	46	4028	5705.0	6869	689.2
	Other/Unknown	12	5080	5655.4	6446	471.5	12	5057	5810.7	6461	500.9
Other	IEP	3					3				
Primary Disability	Other health impairment	1					1				
Finitary Disability	Specific learning disability	1					1				

Table S1.13: Screener Scale Score Summary by Subgroup - Grade 12 (cont.)

* Scale scores cannot be compared across grade bands.

Section 2: Screener Assessment - Percentage of Students by Domain Performance Level

* Domains with Exemption or Not Attempted are excluded from counts, which only include tests assigned to domain performance levels 0-5.

Cubana	Ctotus		0	Li	stening						R	eading			
Subgroup	Status –	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		9,962	4.0	18.3	14.6	56.2	2.7	4.1	9,963	4.0	21.6	18.3	46.5	4.3	5.2
	Female	4,491	3.6	17.6	14.0	57.6	3.0	4.3	4,493	3.6	20.4	17.6	48.1	4.7	5.6
Gender	Male	4,682	4.7	18.9	15.5	54.4	2.6	3.9	4,680	4.7	22.8	19.0	44.7	3.8	5.0
	Missing	789	3.0	18.9	13.4	58.9	2.2	3.5	790	3.0	21.6	18.5	48.1	4.6	4.2
	American Indian or Alaskan Native	24	0.0	25.0	20.8	50.0	4.2	0.0	24	0.0	29.2	20.8	41.7	4.2	4.2
	Asian	2,492	2.5	14.5	13.2	56.9	4.4	8.5	2,491	2.5	17.6	16.5	45.9	7.1	10.3
	Black or African American	1,797	3.8	15.2	14.6	60.6	2.6	3.1	1,797	3.8	19.2	18.6	50.3	3.8	4.3
Ethnicity	Hispanic or Latino	2,668	4.8	24.9	16.0	51.9	1.3	1.0	2,669	4.8	27.7	20.4	43.3	2.0	1.8
	Native Hawaiian or Other Pacific Islander	46	4.3	13.0	8.7	65.2	4.3	4.3	46	4.3	13.0	15.2	54.3	6.5	6.5
	Two or More Races	1,034	8.4	20.0	14.8	52.3	2.0	2.4	1,034	8.4	23.9	18.7	42.0	4.0	3.1
	White	1,670	3.1	16.9	14.4	58.4	2.8	4.5	1,671	3.1	20.3	17.4	49.4	4.4	5.5
	Other/Unknown	231	1.7	10.0	16.0	65.8	3.0	3.5	231	1.7	13.0	17.3	58.9	3.9	5.2
	Gifted	23	0.0	21.7	4.3	39.1	17.4	17.4	23	0.0	21.7	8.7	34.8	8.7	26.1
Other	IEP	130	8.5	35.4	14.6	41.5	0.0	0.0	131	8.4	35.9	20.6	34.4	0.8	0.0
	Migrant	9	0.0	22.2	11.1	66.7	0.0	0.0	9	0.0	22.2	22.2	55.6	0.0	0.0
	Autism	38	15.8	42.1	21.1	21.1	0.0	0.0	38	15.8	47.4	13.2	23.7	0.0	0.0
	Developmental delay	5	0.0	40.0	0.0	60.0	0.0	0.0	5	0.0	40.0	0.0	60.0	0.0	0.0
Primary Disability	Emotional disturbance	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
, <u> </u>	Hearing Impaired	2	0.0	50.0	0.0	50.0	0.0	0.0	3	0.0	66.7	0.0	33.3	0.0	0.0
	Intellectual Disability	5	0.0	80.0	0.0	20.0	0.0	0.0	5	0.0	80.0	0.0	20.0	0.0	0.0
	Multiple disabilities	9	33.3	55.6	0.0	11.1	0.0	0.0	9	33.3	55.6	11.1	0.0	0.0	0.0

Table S2.1: Screener Performance Level by Domain - Kindergarten

Cubaroun	<u>Ctatura</u>			Li	stening				_		R	eading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Orthopedic impairment	2	50.0	0.0	0.0	50.0	0.0	0.0	2	50.0	0.0	0.0	50.0	0.0	0.0
	Other health impairment	7	14.3	28.6	14.3	42.9	0.0	0.0	7	14.3	14.3	28.6	42.9	0.0	0.0
	Specific learning disability	7	0.0	42.9	57.1	0.0	0.0	0.0	7	0.0	28.6	71.4	0.0	0.0	0.0
	Speech or language impairment	65	3.1	20.0	18.5	58.5	0.0	0.0	65	3.1	23.1	26.2	46.2	1.5	0.0

Cubana	Ctatus.			S	peaking	ui icii (,				۷	Vriting			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		9,960	4.0	32.9	21.3	24.7	9.7	7.3	9,963	4.0	59.5	25.8	8.0	1.4	1
	Female	4,491	3.6	30.9	20.4	26.4	10.5	8.2	4,493	3.6	59.3	26.4	8.0	1.3	1
Gender	Male	4,680	4.7	35.1	21.6	23.1	9.0	6.6	4,680	4.7	59.9	24.8	8.0	1.5	1
	Missing	789	3.0	31.9	24.8	24.7	9.3	6.2	790	3.0	58.4	28.2	8.4	1.9	(
	American Indian or Alaskan Native	24	0.0	41.7	16.7	20.8	12.5	8.3	24	0.0	66.7	20.8	12.5	0.0	(
	Asian	2,491	2.5	28.1	21.0	25.3	10.1	12.9	2,491	2.5	48.8	28.3	14.1	3.3	
	Black or African American	1,797	3.8	26.5	25.4	28.5	9.5	6.3	1,797	3.8	59.8	27.0	7.6	1.2	(
Ethnicity	Hispanic or Latino	2,667	4.8	43.5	20.1	20.8	7.9	2.9	2,669	4.8	69.2	22.5	3.0	0.3	(
Luniony	Native Hawaiian or Other Pacific Islander	46	4.3	19.6	32.6	26.1	8.7	8.7	46	4.3	56.5	30.4	8.7	0.0	
	Two or More Races	1,034	8.4	35.6	19.1	23.7	7.9	5.3	1,034	8.4	61.5	22.7	5.9	1.1	
	White	1,670	3.1	29.2	20.2	26.9	12.5	8.1	1,671	3.1	58.8	27.4	8.4	1.0	
	Other/Unknown	231	1.7	29.0	22.9	23.8	14.3	8.2	231	1.7	58.0	29.4	9.5	0.9	
	Gifted	23	0.0	13.0	39.1	8.7	4.3	34.8	23	0.0	13.0	30.4	34.8	17.4	
Other	IEP	130	8.5	53.8	18.5	15.4	3.1	0.8	131	8.4	72.5	16.8	2.3	0.0	(
	Migrant	9	0.0	77.8	11.1	11.1	0.0	0.0	9	0.0	77.8	11.1	11.1	0.0	(
	Autism	38	15.8	63.2	10.5	10.5	0.0	0.0	38	15.8	76.3	7.9	0.0	0.0	(
	Developmental delay	5	0.0	40.0	40.0	0.0	20.0	0.0	5	0.0	40.0	40.0	20.0	0.0	(
Primary Disability	Emotional disturbance	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	
	Hearing Impaired	2	0.0	50.0	50.0	0.0	0.0	0.0	3	0.0	100.0	0.0	0.0	0.0	
	Intellectual Disability	5	0.0	100.0	0.0	0.0	0.0	0.0	5	0.0	100.0	0.0	0.0	0.0	
	Multiple disabilities	9	33.3	66.7	0.0	0.0	0.0	0.0	9	33.3	55.6	11.1	0.0	0.0	(

Table S2.1: Screener Performance Level by Domain - Kindergarten (cont.)

Cubaroun	<u>Ctatua</u>			S	peaking				_		١	Vriting			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Orthopedic impairment	2	50.0	0.0	0.0	0.0	0.0	50.0	2	50.0	0.0	50.0	0.0	0.0	0.0
	Other health impairment	7	14.3	42.9	42.9	0.0	0.0	0.0	7	14.3	71.4	14.3	0.0	0.0	0.0
	Specific learning disability	7	0.0	57.1	28.6	14.3	0.0	0.0	7	0.0	85.7	14.3	0.0	0.0	0.0
	Speech or language impairment	65	3.1	46.2	20.0	27.7	3.1	0.0	65	3.1	69.2	24.6	3.1	0.0	0.0

Outerroute	Ctotus			Li	istening						R	eading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,610	5.3	23.4	6.7	31.6	12.7	20.2	1,610	5.3	46.8	11.4	17.1	8.0	11
	Female	715	7.0	21.0	7.0	29.4	13.3	22.4	715	7.0	43.4	12.3	17.1	7.7	12
Gender	Male	756	4.5	26.2	6.5	32.7	11.8	18.4	756	4.5	49.6	9.9	17.7	8.1	10
	Missing	139	1.4	20.9	6.5	37.4	14.4	19.4	139	1.4	49.6	14.4	13.7	9.4	11
	American Indian or Alaskan Native	3	0.0	0.0	0.0	0.0	100.0	0.0	3	0.0	0.0	33.3	33.3	33.3	(
	Asian	454	0.9	13.9	5.5	27.3	15.0	37.4	454	0.9	31.9	9.7	20.0	13.2	24
	Black or African American	275	4.4	15.6	6.2	40.7	18.5	14.5	275	4.4	41.8	16.0	21.5	6.9	g
Ethnicity	Hispanic or Latino	428	9.3	36.2	6.5	30.8	7.5	9.6	428	9.3	63.1	9.8	11.0	2.8	4
,	Native Hawaiian or Other Pacific Islander	10	0.0	20.0	10.0	40.0	10.0	20.0	10	0.0	60.0	10.0	20.0	10.0	(
	Two or More Races	165	12.7	30.9	9.1	26.1	10.3	10.9	165	12.7	53.3	10.9	12.1	6.7	2
	White	257	3.5	22.6	7.0	33.9	12.5	20.6	257	3.5	46.7	11.7	20.2	9.3	8
	Other/Unknown	18	0.0	27.8	22.2	38.9	0.0	11.1	18	0.0	55.6	16.7	16.7	5.6	į
	Gifted	9	0.0	0.0	0.0	0.0	44.4	55.6	9	0.0	0.0	11.1	33.3	0.0	55
Other	IEP	12	0.0	50.0	0.0	8.3	25.0	16.7	12	0.0	50.0	16.7	16.7	16.7	(
	Migrant	7	0.0	42.9	0.0	57.1	0.0	0.0	7	0.0	85.7	14.3	0.0	0.0	(
	Autism	4	25.0	50.0	0.0	0.0	25.0	0.0	4	25.0	25.0	0.0	25.0	25.0	(
	Emotional disturbance	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	(
Primary Disability	Orthopedic impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	(
	Other health impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	(
	Specific learning disability	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	(

Table S2.2: Screener Performance Level by Domain - Grade 1

Subarous	Status			Li	stening							R	eading			
Subgroup	Status -	N	0	1	2	3	4	5		N	0	1	2	3	4	5
	Speech or language impairment	5	0.0	0.0	0.0	20.0	40.0	40.0	_	5	0.0	20.0	40.0	20.0	20.0	0.0

Cubarroun	Statua		č		peaking						۷	Vriting			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,610	5.3	55.3	17.5	3.6	5.7	12.6	1,610	5.3	53.9	12.3	15.3	4.8	8.
	Female	715	7.0	51.9	17.1	4.9	5.7	13.4	715	7.0	49.8	13.6	15.8	4.1	9
Gender	Male	756	4.5	59.5	16.7	2.1	5.6	11.6	756	4.5	57.7	10.6	14.8	5.7	6
	Missing	139	1.4	49.6	23.7	5.0	6.5	13.7	139	1.4	54.7	15.1	15.1	3.6	10
	American Indian or Alaskan Native	3	0.0	66.7	0.0	33.3	0.0	0.0	3	0.0	33.3	33.3	33.3	0.0	0
	Asian	454	0.9	43.6	17.4	5.3	8.1	24.7	454	0.9	37.2	13.2	21.6	9.3	17.
	Black or African American	275	4.4	54.5	22.2	2.9	4.0	12.0	275	4.4	52.7	17.1	14.5	4.4	6.
Ethnicity	Hispanic or Latino	428	9.3	66.1	14.0	1.9	4.4	4.2	428	9.3	68.5	8.4	9.1	1.9	2.
Luniony	Native Hawaiian or Other Pacific Islander	10	0.0	80.0	10.0	0.0	0.0	10.0	10	0.0	70.0	10.0	10.0	10.0	0.
	Two or More Races	165	12.7	59.4	15.2	3.0	4.8	4.8	165	12.7	61.2	10.3	10.3	1.8	3.
	White	257	3.5	52.9	21.0	4.7	6.2	11.7	257	3.5	54.1	12.8	19.1	4.3	6.
	Other/Unknown	18	0.0	83.3	5.6	0.0	5.6	5.6	18	0.0	72.2	16.7	5.6	0.0	5
	Gifted	9	0.0	44.4	11.1	0.0	11.1	33.3	9	0.0	0.0	22.2	22.2	22.2	33.
Other	IEP	12	0.0	66.7	33.3	0.0	0.0	0.0	12	0.0	41.7	33.3	25.0	0.0	0.
	Migrant	7	0.0	71.4	28.6	0.0	0.0	0.0	7	0.0	100.0	0.0	0.0	0.0	0.
	Autism	4	25.0	75.0	0.0	0.0	0.0	0.0	4	25.0	25.0	25.0	25.0	0.0	0.
	Emotional disturbance	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.
Primary Disability	Orthopedic impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.
	Other health impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.
	Specific learning disability	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.

Table S2.2: Screener Performance Level by Domain - Grade 1 (cont.)

Cubara	Ctatus.			Sj	beaking						v	Vriting			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Speech or language impairment	5	0.0	20.0	80.0	0.0	0.0	0.0	5	0.0	0.0	60.0	40.0	0.0	0.0

0h	04-4			Li	stening						R	eading			
Subgroup	Status –	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,234	6.1	22.7	9.8	24.1	19.2	18.2	1,235	6.1	45.5	8.0	21.4	8.7	10
	Female	514	6.6	20.4	9.3	21.8	21.0	20.8	515	6.6	41.4	8.7	23.3	7.8	12
Gender	Male	635	6.3	25.4	9.6	25.2	17.0	16.5	635	6.3	49.0	7.1	19.5	9.6	8
	Missing	85	1.2	16.5	14.1	29.4	24.7	14.1	85	1.2	44.7	10.6	23.5	8.2	11
	American Indian or Alaskan Native	3	0.0	0.0	0.0	0.0	100.0	0.0	3	0.0	0.0	0.0	66.7	33.3	0
	Asian	283	1.4	16.6	10.6	25.4	17.7	28.3	284	1.4	38.7	8.8	22.2	9.2	19
	Black or African American	230	3.0	14.3	8.3	23.9	28.7	21.7	230	3.0	36.1	8.3	28.3	13.0	11
Ethnicity	Hispanic or Latino	353	11.6	31.7	9.9	23.2	14.7	8.8	353	11.6	55.8	7.4	16.4	5.9	2
Lumony	Native Hawaiian or Other Pacific Islander	8	0.0	37.5	0.0	12.5	25.0	25.0	8	0.0	37.5	12.5	37.5	0.0	12
	Two or More Races	144	13.2	28.5	9.0	23.6	14.6	11.1	144	13.2	50.7	6.9	18.8	5.6	4
	White	195	2.1	20.0	10.8	25.1	21.5	20.5	195	2.1	44.1	8.7	22.6	10.3	12
	Other/Unknown	18	0.0	27.8	16.7	22.2	5.6	27.8	18	0.0	55.6	5.6	11.1	11.1	16
	Gifted	19	0.0	0.0	10.5	0.0	31.6	57.9	19	0.0	5.3	0.0	36.8	21.1	36
Other	IEP	8	12.5	12.5	12.5	50.0	12.5	0.0	9	11.1	44.4	11.1	33.3	0.0	0
	Migrant	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0
	Autism	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0
	Hearing Impaired	0							1	0.0	100.0	0.0	0.0	0.0	0
Primary Disability	Multiple disabilities	2	50.0	0.0	50.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0
	Speech or language impairment	4	0.0	25.0	0.0	50.0	25.0	0.0	4	0.0	50.0	0.0	50.0	0.0	0

Table S2.3: Screener Performance Level by Domain - Grade 2

0. h	04-4		<i>.</i>	S	peaking						١	Vriting			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,234	6.1	52.2	13.0	8.1	7.9	12.8	1,235	6.1	44.9	11.5	18.3	7.9	11.
	Female	514	6.6	48.8	12.1	9.7	8.4	14.4	515	6.6	41.9	11.8	18.4	8.7	12.
Gender	Male	635	6.3	55.0	13.2	7.2	7.6	10.7	635	6.3	47.4	11.2	17.6	7.2	10.
	Missing	85	1.2	51.8	16.5	4.7	7.1	18.8	85	1.2	44.7	11.8	22.4	8.2	11.
	American Indian or Alaskan Native	3	0.0	33.3	66.7	0.0	0.0	0.0	3	0.0	0.0	66.7	33.3	0.0	0.
	Asian	283	1.4	52.3	9.9	7.1	9.2	20.1	284	1.4	38.4	11.3	18.0	11.6	19.4
	Black or African American	230	3.0	41.7	19.6	10.4	10.4	14.8	230	3.0	34.3	13.9	25.7	10.4	12.
Ethnicity	Hispanic or Latino	353	11.6	58.4	11.3	6.5	5.7	6.5	353	11.6	56.1	9.3	13.6	5.4	4.
Linnony	Native Hawaiian or Other Pacific Islander	8	0.0	37.5	37.5	12.5	0.0	12.5	8	0.0	37.5	12.5	25.0	12.5	12.
	Two or More Races	144	13.2	55.6	10.4	8.3	6.9	5.6	144	13.2	50.0	9.0	18.1	3.5	6.3
	White	195	2.1	50.3	13.3	10.3	8.2	15.9	195	2.1	43.1	14.4	19.0	7.2	14.
	Other/Unknown	18	0.0	66.7	5.6	0.0	5.6	22.2	18	0.0	55.6	5.6	11.1	11.1	16.
	Gifted	19	0.0	47.4	10.5	10.5	21.1	10.5	19	0.0	5.3	5.3	26.3	15.8	47.
Other	IEP	8	12.5	62.5	0.0	12.5	12.5	0.0	9	11.1	33.3	22.2	22.2	11.1	0.
	Migrant	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
	Autism	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0.
	Hearing Impaired	0							1	0.0	0.0	100.0	0.0	0.0	0.0
rimary Disability	Multiple disabilities	2	50.0	50.0	0.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0.0
	Speech or language impairment	4	0.0	50.0	0.0	25.0	25.0	0.0	4	0.0	50.0	0.0	25.0	25.0	0.0

Table S2.3: Screener Performance Level by Domain - Grade 2 (cont.)

Cubana	Status -			Li	stening						R	leading			
Subgroup	Status	Ν	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,076	6.9	22.0	12.4	20.0	19.7	19.1	1,075	6.9	45.7	13.6	16.9	6.3	1(
	Female	478	7.9	19.2	11.5	20.1	19.2	22.0	477	8.0	41.9	12.8	18.4	6.7	1
Gender	Male	528	6.6	22.9	13.3	20.6	20.3	16.3	528	6.6	47.3	15.0	15.9	5.7	1
	Missing	70	1.4	34.3	11.4	14.3	18.6	20.0	70	1.4	58.6	8.6	14.3	8.6	
	American Indian or Alaskan Native	2	0.0	0.0	0.0	0.0	50.0	50.0	2	0.0	0.0	50.0	0.0	50.0	
	Asian	228	1.3	11.0	11.0	19.3	21.1	36.4	228	1.3	32.9	12.3	18.9	12.3	2
	Black or African American	216	6.9	22.2	10.2	19.9	25.5	15.3	216	6.9	43.5	14.8	21.3	7.9	:
Ethnicity	Hispanic or Latino	318	11.0	30.5	14.8	16.7	16.0	11.0	318	11.0	54.7	11.3	14.8	2.5	
	Native Hawaiian or Other Pacific Islander	6	0.0	16.7	0.0	50.0	33.3	0.0	6	0.0	33.3	16.7	50.0	0.0	
	Two or More Races	146	9.6	24.7	13.7	24.0	15.8	12.3	145	9.7	55.9	11.0	14.5	4.8	
	White	145	4.8	19.3	11.7	22.1	17.9	24.1	145	4.8	41.4	19.3	11.0	4.8	1
	Other/Unknown	15	0.0	13.3	13.3	33.3	40.0	0.0	15	0.0	33.3	26.7	40.0	0.0	
	Gifted	3	0.0	0.0	0.0	0.0	0.0	100.0	3	0.0	0.0	0.0	0.0	33.3	6
Other	IEP	8	12.5	12.5	12.5	62.5	0.0	0.0	7	14.3	57.1	28.6	0.0	0.0	
	Migrant	3	0.0	66.7	0.0	0.0	33.3	0.0	3	0.0	66.7	0.0	33.3	0.0	
	Autism	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	
	Intellectual Disability	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	
rimary Disability	Multiple disabilities	1	0.0	100.0	0.0	0.0	0.0	0.0	0						
	Other health impairment	3	0.0	33.3	0.0	33.3	33.3	0.0	3	0.0	66.7	33.3	0.0	0.0	
	Specific learning disability	2	50.0	0.0	50.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	

Table S2.4: Screener Performance Level by Domain - Grade 3

Cub manua	C t_t			Li	stening						R	leading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Speech or language impairment	2	0.0	0.0	0.0	100.0	0.0	0.0	2	0.0	0.0	100.0	0.0	0.0	0.0

<u>Cubaroun</u>	Status -			S	peaking						\	Vriting			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,075	6.9	48.0	9.9	8.7	9.4	17.2	1,075	6.9	47.2	12.7	14.3	6.0	12
	Female	477	8.0	44.4	9.2	8.8	9.9	19.7	477	8.0	43.4	11.9	14.9	6.7	1
Gender	Male	528	6.6	50.6	11.0	7.8	9.1	15.0	528	6.6	49.1	14.2	13.6	5.5	11
	Missing	70	1.4	52.9	5.7	14.3	8.6	17.1	70	1.4	58.6	7.1	15.7	5.7	1
	American Indian or Alaskan Native	2	0.0	0.0	0.0	0.0	50.0	50.0	2	0.0	50.0	0.0	0.0	0.0	50
	Asian	228	1.3	37.3	8.8	8.3	10.5	33.8	228	1.3	32.5	14.9	15.4	9.2	26
	Black or African American	216	6.9	44.0	13.9	11.1	11.1	13.0	216	6.9	45.8	13.9	16.7	8.8	7
Ethnicity	Hispanic or Latino	318	11.0	58.2	7.2	5.0	8.5	10.1	318	11.0	56.6	8.8	13.5	3.8	(
	Native Hawaiian or Other Pacific Islander	6	0.0	50.0	0.0	33.3	0.0	16.7	6	0.0	50.0	16.7	33.3	0.0	(
	Two or More Races	145	9.7	53.1	11.7	8.3	8.3	9.0	145	9.7	56.6	10.3	11.7	4.8	(
	White	145	4.8	46.2	8.3	12.4	6.9	21.4	145	4.8	44.1	15.9	11.7	3.4	20
	Other/Unknown	15	0.0	26.7	26.7	13.3	20.0	13.3	15	0.0	26.7	40.0	26.7	6.7	(
	Gifted	3	0.0	0.0	0.0	33.3	0.0	66.7	3	0.0	0.0	0.0	0.0	33.3	6
Other	IEP	7	14.3	57.1	28.6	0.0	0.0	0.0	7	14.3	57.1	14.3	14.3	0.0	(
	Migrant	3	0.0	66.7	0.0	33.3	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0	(
	Autism	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	
	Intellectual Disability	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	
rimary Disability	Multiple disabilities	0							0						
	Other health impairment	3	0.0	66.7	0.0	33.3	0.0	0.0	3	0.0	100.0	0.0	0.0	0.0	
	Specific learning disability	2	50.0	50.0	0.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	(

Table S2.4: Screener Performance Level by Domain - Grade 3 (cont.)

Cub manua	C 4-4			Sp	beaking						۷	Vriting			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Speech or language impairment	2	0.0	50.0	50.0	0.0	0.0	0.0	2	0.0	0.0	50.0	50.0	0.0	0.0

Cubanaua	Statua		2	Li	istening						R	eading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		910	8.9	26.4	6.7	11.3	17.0	29.7	910	8.9	38.2	8.1	13.2	9.9	21.6
	Female	415	8.7	24.1	5.3	9.9	18.1	34.0	415	8.7	33.7	9.2	13.3	10.8	24.3
Gender	Male	431	9.3	29.2	7.9	12.3	16.2	25.1	431	9.3	42.2	7.7	13.2	9.3	18.3
	Missing	64	7.8	21.9	7.8	14.1	15.6	32.8	64	7.8	40.6	4.7	12.5	7.8	26.6
	American Indian or Alaskan Native	5	20.0	0.0	20.0	20.0	20.0	20.0	5	20.0	40.0	0.0	0.0	20.0	20.0
	Asian	185	2.2	9.2	7.6	15.1	20.0	45.9	186	2.2	23.1	14.0	10.2	14.0	36.6
	Black or African American	170	6.5	15.3	8.8	13.5	21.8	34.1	170	6.5	29.4	7.1	22.4	12.9	21.8
Ethnicity	Hispanic or Latino	281	13.9	39.1	5.7	8.5	14.6	18.1	281	13.9	49.1	6.4	12.1	7.1	11.4
	Native Hawaiian or Other Pacific Islander	5	0.0	40.0	0.0	0.0	20.0	40.0	5	0.0	40.0	0.0	20.0	20.0	20.0
	Two or More Races	119	12.6	37.8	3.4	9.2	16.8	20.2	118	12.7	44.9	5.1	12.7	8.5	16.1
	White	132	8.3	28.8	6.8	9.1	12.1	34.8	132	8.3	40.2	8.3	8.3	7.6	27.3
	Other/Unknown	13	0.0	15.4	15.4	30.8	15.4	23.1	13	0.0	53.8	7.7	15.4	0.0	23.1
	Gifted	6	0.0	16.7	0.0	0.0	16.7	66.7	6	0.0	16.7	0.0	16.7	0.0	66.7
Other	IEP	10	30.0	20.0	0.0	10.0	20.0	20.0	10	30.0	20.0	0.0	20.0	20.0	10.0
	Migrant	3	0.0	66.7	0.0	0.0	0.0	33.3	3	0.0	66.7	0.0	33.3	0.0	0.0
	Autism	3	66.7	0.0	0.0	33.3	0.0	0.0	2	100.0	0.0	0.0	0.0	0.0	0.0
	Emotional disturbance	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
Primary Disability	Hearing Impaired	0							1	0.0	0.0	0.0	0.0	100.0	0.0
	Intellectual Disability	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
	Multiple disabilities	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0

Table S2.5: Screener Performance Level by Domain - Grade 4

Cubarous	Ctatura			Li	stening				_		R	eading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Orthopedic impairment	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	0.0	100.0
	Other health impairment	1	0.0	0.0	0.0	0.0	100.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0.0
	Specific learning disability	2	0.0	50.0	0.0	0.0	0.0	50.0	2	0.0	50.0	0.0	0.0	50.0	0.0
	Speech or language impairment	2	0.0	0.0	0.0	0.0	100.0	0.0	2	0.0	0.0	0.0	100.0	0.0	0.0

Cubana	Ctotus	Lever	2		peaking						١	Vriting			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		909	8.9	36.9	7.9	8.7	4.6	33.0	910	8.9	36.0	7.0	18.4	7.3	22.
	Female	415	8.7	34.0	5.8	9.4	3.9	38.3	415	8.7	32.5	5.1	20.5	8.9	24.
Gender	Male	430	9.3	40.0	9.8	8.1	5.3	27.4	431	9.3	39.7	8.4	16.9	5.8	20.
	Missing	64	7.8	34.4	9.4	7.8	4.7	35.9	64	7.8	34.4	10.9	14.1	6.3	26.
	American Indian or Alaskan Native	5	20.0	20.0	20.0	20.0	0.0	20.0	5	20.0	20.0	20.0	20.0	0.0	20.0
	Asian	185	2.2	24.9	7.0	10.8	2.7	52.4	186	2.2	19.9	9.7	23.1	7.5	37.6
	Black or African American	170	6.5	25.3	13.5	9.4	8.8	36.5	170	6.5	27.6	6.5	24.7	12.9	21.8
Ethnicity	Hispanic or Latino	281	13.9	47.3	6.4	7.8	3.9	20.6	281	13.9	46.6	6.4	15.7	6.0	11.4
	Native Hawaiian or Other Pacific Islander	5	0.0	40.0	0.0	0.0	0.0	60.0	5	0.0	40.0	0.0	20.0	20.0	20.0
	Two or More Races	118	12.7	45.8	3.4	5.9	5.9	26.3	118	12.7	44.1	5.9	15.3	5.9	16.1
	White	132	8.3	37.9	8.3	9.1	2.3	34.1	132	8.3	40.2	3.8	12.9	3.8	31.1
	Other/Unknown	13	0.0	46.2	15.4	7.7	7.7	23.1	13	0.0	38.5	30.8	7.7	0.0	23.1
	Gifted	6	0.0	16.7	16.7	0.0	16.7	50.0	6	0.0	16.7	0.0	16.7	16.7	50.0
Other	IEP	9	33.3	22.2	0.0	0.0	22.2	22.2	10	30.0	20.0	0.0	20.0	20.0	10.0
	Migrant	3	0.0	66.7	0.0	0.0	0.0	33.3	3	0.0	66.7	0.0	33.3	0.0	0.0
	Autism	2	100.0	0.0	0.0	0.0	0.0	0.0	2	100.0	0.0	0.0	0.0	0.0	0.0
	Emotional disturbance	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
Primary Disability	Hearing Impaired	0							1	0.0	0.0	0.0	0.0	100.0	0.0
	Intellectual Disability	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
	Multiple disabilities	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0

Table S2.5: Screener Performance Level by Domain - Grade 4 (cont.)

Cubarous	<u>Ctotus</u>			S	peaking				_		١	Nriting			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Orthopedic impairment	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	0.0	100.0
	Other health impairment	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	100.0	0.0	0.0
	Specific learning disability	2	0.0	50.0	0.0	0.0	50.0	0.0	2	0.0	50.0	0.0	0.0	50.0	0.0
	Speech or language impairment	2	0.0	0.0	0.0	0.0	50.0	50.0	2	0.0	0.0	0.0	100.0	0.0	0.0

C. harmanna	64-4			Li	stening						R	eading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		912	8.6	27.5	6.4	9.1	19.8	28.6	912	8.6	37.9	12.2	14.1	7.3	19.
	Female	400	9.3	26.5	6.3	10.8	18.5	28.8	400	9.3	37.0	13.5	12.5	6.3	21.
Gender	Male	456	8.3	27.6	6.8	7.7	20.8	28.7	456	8.3	38.4	11.4	15.1	8.6	18.3
	Missing	56	5.4	33.9	3.6	8.9	21.4	26.8	56	5.4	41.1	8.9	17.9	5.4	21.4
	American Indian or Alaskan Native	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	179	2.8	14.0	8.9	10.1	25.1	39.1	179	2.8	27.4	14.5	17.3	7.3	30.7
	Black or African American	183	7.7	21.9	8.7	13.1	20.2	28.4	183	7.7	36.6	14.2	14.2	7.7	19.7
Ethnicity	Hispanic or Latino	264	15.9	35.6	5.7	7.2	18.2	17.4	264	15.9	44.7	10.2	13.6	6.4	9.1
Luniony	Native Hawaiian or Other Pacific Islander	8	12.5	25.0	12.5	12.5	25.0	12.5	8	12.5	37.5	0.0	37.5	0.0	12.5
	Two or More Races	119	8.4	31.1	1.7	2.5	21.0	35.3	119	8.4	35.3	8.4	15.1	14.3	18.5
	White	150	3.3	32.7	4.7	12.0	15.3	32.0	150	3.3	42.0	14.0	9.3	4.0	27.3
	Other/Unknown	8	12.5	37.5	12.5	0.0	12.5	25.0	8	12.5	37.5	12.5	12.5	0.0	25.0
	Gifted	8	0.0	0.0	25.0	0.0	12.5	62.5	8	0.0	12.5	12.5	12.5	0.0	62.5
Other	IEP	6	0.0	33.3	0.0	16.7	33.3	16.7	6	0.0	50.0	16.7	0.0	33.3	0.0
	Migrant	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	0.0	100.0
	Developmental delay	0							0						
	Emotional disturbance	2	0.0	50.0	0.0	0.0	0.0	50.0	2	0.0	50.0	0.0	0.0	50.0	0.0
Primary Disability	Intellectual Disability	0							0						
	Multiple disabilities	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Other health impairment	1	0.0	0.0	0.0	0.0	100.0	0.0	1	0.0	0.0	0.0	0.0	100.0	0.0

Table S2.6: Screener Performance Level by Domain - Grade 5

Subarous	Status			Li	stening						R	leading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Specific learning disability	2	0.0	0.0	0.0	50.0	50.0	0.0	2	0.0	50.0	50.0	0.0	0.0	0.0

Cubara	Ct-tu-				peaking	(conta)					١	Vriting			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		912	8.6	37.7	9.1	7.5	5.8	31.4	912	8.6	32.1	9.5	23.2	5.7	20.8
	Female	400	9.3	37.8	9.8	6.5	6.3	30.5	400	9.3	30.5	9.5	23.0	5.5	22.
Gender	Male	456	8.3	37.7	8.6	7.7	5.5	32.2	456	8.3	33.1	9.6	23.5	5.7	19.
	Missing	56	5.4	37.5	8.9	12.5	5.4	30.4	56	5.4	35.7	8.9	23.2	7.1	19.0
	American Indian or Alaskan Native	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	179	2.8	29.6	13.4	5.0	7.8	41.3	179	2.8	21.2	10.1	29.1	5.0	31.8
	Black or African American	183	7.7	32.8	13.7	11.5	3.3	31.1	183	7.7	30.6	13.7	22.4	4.4	21.3
Ethnicity	Hispanic or Latino	264	15.9	44.7	6.4	4.9	6.1	22.0	264	15.9	39.4	9.1	20.5	5.3	9.8
Lumony	Native Hawaiian or Other Pacific Islander	8	12.5	25.0	12.5	12.5	12.5	25.0	8	12.5	25.0	12.5	25.0	12.5	12.5
	Two or More Races	119	8.4	35.3	5.0	8.4	6.7	36.1	119	8.4	31.1	6.7	21.8	12.6	19.3
	White	150	3.3	43.3	6.7	8.0	5.3	33.3	150	3.3	34.7	7.3	23.3	3.3	28.0
	Other/Unknown	8	12.5	37.5	0.0	25.0	0.0	25.0	8	12.5	37.5	0.0	25.0	0.0	25.0
	Gifted	8	0.0	0.0	12.5	37.5	12.5	37.5	8	0.0	12.5	0.0	25.0	0.0	62.5
Other	IEP	6	0.0	50.0	0.0	16.7	0.0	33.3	6	0.0	50.0	0.0	16.7	33.3	0.0
	Migrant	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	0.0	100.0
	Developmental delay	0							0						
	Emotional disturbance	2	0.0	50.0	0.0	0.0	0.0	50.0	2	0.0	50.0	0.0	0.0	50.0	0.0
Primary Disability	Intellectual Disability	0							0						
	Multiple disabilities	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Other health impairment	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	0.0	0.0	100.0	0.0

Table S2.6: Screener Performance Level by Domain - Grade 5 (cont.)

Culture un	Ct =t++=			Sp	beaking							v	Vriting			
Subgroup	Status	N	0	1	2	3	4	5	N	_	0	1	2	3	4	5
	Specific learning disability	2	0.0	50.0	0.0	0.0	0.0	50.0	-	2	0.0	50.0	0.0	50.0	0.0	0.0

Cubaurous	C4-11-1-			Li	stening						R	eading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		771	12.5	23.7	7.4	11.7	16.5	28.3	771	12.5	35.3	5.6	18.8	7.7	2
	Female	342	12.9	21.9	6.7	11.4	14.6	32.5	342	12.9	31.3	6.1	18.4	8.5	2
Gender	Male	369	12.7	24.7	8.1	11.4	17.6	25.5	369	12.7	38.5	4.3	18.7	7.0	1
	Missing	60	8.3	28.3	6.7	15.0	20.0	21.7	60	8.3	38.3	10.0	21.7	6.7	1
	American Indian or Alaskan Native	4	0.0	25.0	0.0	25.0	25.0	25.0	4	0.0	25.0	0.0	50.0	0.0	2
	Asian	129	3.1	11.6	7.8	11.6	12.4	53.5	129	3.1	24.8	4.7	14.7	7.8	4
	Black or African American	166	11.4	19.3	8.4	16.3	15.7	28.9	166	11.4	34.9	5.4	20.5	10.8	1
Ethnicity	Hispanic or Latino	282	18.4	30.9	6.7	8.9	18.1	17.0	282	18.4	40.1	5.7	19.5	5.7	1
Linnony	Native Hawaiian or Other Pacific Islander	2	0.0	50.0	0.0	0.0	50.0	0.0	2	0.0	50.0	0.0	50.0	0.0	
	Two or More Races	66	18.2	27.3	6.1	10.6	19.7	18.2	66	18.2	40.9	3.0	18.2	9.1	1
	White	112	7.1	24.1	8.0	11.6	14.3	34.8	112	7.1	33.0	8.0	16.1	8.0	2
	Other/Unknown	10	10.0	20.0	10.0	20.0	30.0	10.0	10	10.0	30.0	10.0	40.0	0.0	1
	Gifted	4	0.0	0.0	0.0	0.0	0.0	100.0	4	0.0	0.0	0.0	0.0	50.0	5
Other	IEP	5	0.0	20.0	0.0	20.0	60.0	0.0	5	0.0	40.0	0.0	60.0	0.0	
	Migrant	4	0.0	0.0	25.0	0.0	50.0	25.0	4	0.0	25.0	0.0	50.0	0.0	2
	Autism	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	
	Intellectual Disability	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	
rimary Disability	Other health impairment	0							0						
	Specific learning disability	3	0.0	0.0	0.0	0.0	100.0	0.0	3	0.0	0.0	0.0	100.0	0.0	

Table S2.7: Screener Performance Level by Domain - Grade 6

Culture and	C4-11-1-	20,000			peaking	(contra)				_	\	Vriting			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		771	12.5	30.4	8.8	14.8	5.3	28.3	771	12.5	27.9	9.5	21.5	4.9	23
	Female	342	12.9	27.2	9.6	12.3	6.4	31.6	342	12.9	25.7	9.6	18.4	6.1	27
Gender	Male	369	12.7	32.8	7.9	16.3	4.1	26.3	369	12.7	29.5	9.2	23.3	4.3	20
	Missing	60	8.3	33.3	10.0	20.0	6.7	21.7	60	8.3	30.0	10.0	28.3	1.7	2′
	American Indian or Alaskan Native	4	0.0	25.0	0.0	50.0	0.0	25.0	4	0.0	25.0	25.0	25.0	0.0	25
	Asian	129	3.1	17.1	12.4	12.4	5.4	49.6	129	3.1	14.7	11.6	18.6	3.1	48
	Black or African American	166	11.4	24.7	9.6	21.7	4.2	28.3	166	11.4	27.1	10.8	22.3	7.2	2
Ethnicity	Hispanic or Latino	282	18.4	37.6	7.8	11.7	6.7	17.7	282	18.4	34.0	7.8	22.0	4.6	1
Luniony	Native Hawaiian or Other Pacific Islander	2	0.0	0.0	50.0	50.0	0.0	0.0	2	0.0	50.0	0.0	50.0	0.0	(
	Two or More Races	66	18.2	34.8	4.5	13.6	9.1	19.7	66	18.2	30.3	9.1	21.2	4.5	10
	White	112	7.1	33.9	6.3	14.3	1.8	36.6	112	7.1	26.8	9.8	20.5	4.5	3
	Other/Unknown	10	10.0	30.0	30.0	10.0	0.0	20.0	10	10.0	30.0	0.0	40.0	10.0	10
	Gifted	4	0.0	0.0	25.0	25.0	0.0	50.0	4	0.0	0.0	0.0	25.0	25.0	50
Other	IEP	5	0.0	20.0	0.0	60.0	20.0	0.0	5	0.0	20.0	20.0	60.0	0.0	1
	Migrant	4	0.0	25.0	0.0	0.0	75.0	0.0	4	0.0	25.0	0.0	25.0	25.0	2
	Autism	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	(
	Intellectual Disability	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	(
Primary Disability	Other health impairment	0							0						
	Specific learning disability	3	0.0	0.0	0.0	66.7	33.3	0.0	3	0.0	0.0	0.0	100.0	0.0	(

Table S2.7: Screener Performance Level by Domain - Grade 6 (cont.)

Subaroun	Status -			Li	stening						R	eading			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		829	18.8	31.1	6.9	13.3	7.2	22.7	829	18.8	39.4	7.8	12.9	7.2	1
	Female	392	19.1	28.6	7.7	13.8	5.6	25.3	392	19.1	38.0	7.7	11.7	8.7	1
Gender	Male	393	19.1	33.6	6.6	12.7	8.4	19.6	393	19.1	41.2	8.1	13.7	5.3	1
	Missing	44	13.6	31.8	2.3	13.6	11.4	27.3	44	13.6	36.4	6.8	15.9	11.4	1
	American Indian or Alaskan Native	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	
	Asian	123	1.6	15.4	9.8	22.8	9.8	40.7	123	1.6	27.6	10.6	18.7	8.1	3
	Black or African American	155	11.6	25.8	9.0	16.8	7.7	29.0	155	11.6	37.4	10.3	15.5	11.6	1
Ethnicity	Hispanic or Latino	327	32.1	36.4	6.1	7.6	5.8	11.9	327	32.1	43.4	5.2	8.9	4.9	
	Native Hawaiian or Other Pacific Islander	5	0.0	80.0	0.0	20.0	0.0	0.0	5	0.0	80.0	20.0	0.0	0.0	
	Two or More Races	103	17.5	40.8	2.9	11.7	6.8	20.4	103	17.5	43.7	6.8	13.6	5.8	1
	White	109	9.2	29.4	7.3	15.6	9.2	29.4	109	9.2	39.4	9.2	14.7	8.3	1
	Other/Unknown	6	33.3	33.3	0.0	16.7	0.0	16.7	6	33.3	16.7	16.7	16.7	16.7	
	Gifted	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	0.0	10
Other	IEP	10	30.0	10.0	0.0	50.0	0.0	10.0	10	30.0	40.0	10.0	10.0	0.0	1
	Migrant	3	0.0	33.3	0.0	33.3	33.3	0.0	3	0.0	33.3	33.3	0.0	33.3	
	Autism	2	50.0	0.0	0.0	0.0	0.0	50.0	2	50.0	0.0	0.0	0.0	0.0	5
	Intellectual Disability	2	50.0	0.0	0.0	50.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	
Primary Disability	Multiple disabilities	0							0						
	Other health impairment	3	33.3	0.0	0.0	66.7	0.0	0.0	3	33.3	33.3	0.0	33.3	0.0	
	Specific learning disability	3	0.0	33.3	0.0	66.7	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0	

Table S2.8: Screener Performance Level by Domain - Grade 7

Subarous	Status			l	Listening	g						Reading			
Subgroup	Status	Ν	0	1	2	3	4	5	N	0	1	2	3	4	5
	Visual impairment	0				-			0						

Cubana	Ctotus				peaking						۷	Vriting			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		829	18.8	34.9	8.9	9.4	3.9	24.1	829	18.8	37.8	8.9	11.3	5.3	17
	Female	392	19.1	32.4	8.7	9.7	3.1	27.0	392	19.1	35.5	9.4	10.7	5.4	19
Gender	Male	393	19.1	37.2	9.4	8.9	4.6	20.9	393	19.1	40.2	8.4	12.0	4.8	1
	Missing	44	13.6	36.4	6.8	11.4	4.5	27.3	44	13.6	36.4	9.1	11.4	9.1	2
	American Indian or Alaskan Native	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	(
	Asian	123	1.6	19.5	13.8	16.3	4.1	44.7	123	1.6	24.4	15.4	14.6	7.3	30
	Black or African American	155	11.6	26.5	12.3	17.4	5.2	27.1	155	11.6	34.8	12.3	12.9	7.1	2
Ethnicity	Hispanic or Latino	327	32.1	41.6	5.5	4.6	3.1	13.1	327	32.1	42.2	5.8	7.6	3.1	ę
	Native Hawaiian or Other Pacific Islander	5	0.0	80.0	20.0	0.0	0.0	0.0	5	0.0	80.0	0.0	20.0	0.0	(
	Two or More Races	103	17.5	41.7	8.7	5.8	3.9	22.3	103	17.5	44.7	4.9	12.6	5.8	14
	White	109	9.2	35.8	8.3	9.2	3.7	33.9	109	9.2	36.7	9.2	15.6	6.4	2
	Other/Unknown	6	33.3	33.3	16.7	0.0	16.7	0.0	6	33.3	16.7	33.3	0.0	16.7	
	Gifted	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	0.0	10
Other	IEP	10	30.0	20.0	20.0	20.0	0.0	10.0	10	30.0	40.0	20.0	0.0	0.0	1
	Migrant	3	0.0	33.3	0.0	0.0	33.3	33.3	3	0.0	33.3	0.0	33.3	33.3	1
	Autism	2	50.0	0.0	0.0	0.0	0.0	50.0	2	50.0	0.0	0.0	0.0	0.0	5
	Intellectual Disability	2	50.0	0.0	50.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	
Primary Disability	Multiple disabilities	0							0						
	Other health impairment	3	33.3	33.3	33.3	0.0	0.0	0.0	3	33.3	33.3	33.3	0.0	0.0	
	Specific learning disability	3	0.0	33.3	0.0	66.7	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0	

Table S2.8: Screener Performance Level by Domain - Grade 7 (cont.)

Subarous	Status			:	Speaking	I						Writing			
Subgroup	Status	N	0	1	2	3	4	5	N	0	1	2	3	4	5
	Visual impairment	0							0						

0	01-1		2	Li	stening						R	leading			
Subgroup	Status –	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		682	15.4	32.0	9.7	15.0	8.5	19.5	682	15.4	42.2	8.9	19.8	5.1	8.5
	Female	292	13.0	30.1	9.2	16.8	9.6	21.2	292	13.0	40.1	11.6	21.2	5.1	8.9
Gender	Male	346	17.6	33.5	10.7	13.6	6.6	17.9	346	17.6	44.8	6.9	17.3	5.2	8.
	Missing	44	13.6	31.8	4.5	13.6	15.9	20.5	44	13.6	36.4	6.8	29.5	4.5	9.1
	American Indian or Alaskan Native	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	106	3.8	19.8	15.1	18.9	13.2	29.2	106	3.8	36.8	8.5	24.5	6.6	19.8
	Black or African American	127	13.4	21.3	10.2	20.5	15.0	19.7	127	13.4	32.3	12.6	29.9	6.3	5.5
Ethnicity	Hispanic or Latino	232	18.1	41.4	7.8	11.2	6.0	15.5	232	18.1	48.3	8.6	15.1	4.7	5.2
Linnony	Native Hawaiian or Other Pacific Islander	3	0.0	33.3	33.3	33.3	0.0	0.0	3	0.0	66.7	33.3	0.0	0.0	0.0
	Two or More Races	108	30.6	38.0	1.9	9.3	4.6	15.7	108	30.6	39.8	4.6	16.7	2.8	5.6
	White	98	7.1	28.6	15.3	18.4	6.1	24.5	98	7.1	46.9	9.2	18.4	6.1	12.2
	Other/Unknown	7	28.6	42.9	14.3	14.3	0.0	0.0	7	28.6	57.1	14.3	0.0	0.0	0.0
	Gifted	2	0.0	0.0	0.0	0.0	50.0	50.0	2	0.0	0.0	0.0	100.0	0.0	0.0
Other	IEP	8	12.5	12.5	25.0	25.0	0.0	25.0	8	12.5	25.0	25.0	12.5	0.0	25.0
	Migrant	3	0.0	66.7	0.0	0.0	0.0	33.3	3	0.0	66.7	0.0	33.3	0.0	0.0
	Autism	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
Primary Disability	Other health impairment	4	0.0	25.0	50.0	0.0	0.0	25.0	4	0.0	50.0	25.0	0.0	0.0	25.0
	Specific learning disability	3	0.0	0.0	0.0	66.7	0.0	33.3	3	0.0	0.0	33.3	33.3	0.0	33.3

Table S2.9: Screener Performance Level by Domain - Grade 8

Cub manua	Ctotus		·		peaking	`					\	Vriting			
Subgroup	Status –	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		682	15.4	35.5	9.8	12.5	5.7	21.1	682	15.4	39.7	11.6	14.8	4.7	13.8
	Female	292	13.0	32.5	11.6	14.4	6.8	21.6	292	13.0	38.4	12.7	16.4	3.8	15.8
Gender	Male	346	17.6	38.7	8.4	11.0	4.3	19.9	346	17.6	41.3	10.4	13.3	5.2	12.1
	Missing	44	13.6	29.5	9.1	11.4	9.1	27.3	44	13.6	36.4	13.6	15.9	6.8	13.6
	American Indian or Alaskan Native	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	106	3.8	21.7	15.1	17.0	4.7	37.7	106	3.8	30.2	15.1	22.6	2.8	25.5
	Black or African American	127	13.4	23.6	11.0	21.3	7.9	22.8	127	13.4	27.6	15.7	25.2	6.3	11.8
Ethnicity	Hispanic or Latino	232	18.1	44.4	10.8	6.5	5.6	14.7	232	18.1	48.7	8.2	10.8	3.9	10.3
Lumony	Native Hawaiian or Other Pacific Islander	3	0.0	66.7	0.0	33.3	0.0	0.0	3	0.0	66.7	0.0	33.3	0.0	0.0
	Two or More Races	108	30.6	38.9	2.8	4.6	5.6	17.6	108	30.6	39.8	5.6	8.3	5.6	10.2
	White	98	7.1	38.8	8.2	18.4	5.1	22.4	98	7.1	41.8	17.3	10.2	6.1	17.3
	Other/Unknown	7	28.6	42.9	14.3	14.3	0.0	0.0	7	28.6	57.1	14.3	0.0	0.0	0.0
	Gifted	2	0.0	0.0	50.0	50.0	0.0	0.0	2	0.0	0.0	0.0	100.0	0.0	0.0
Other	IEP	8	12.5	37.5	12.5	12.5	0.0	25.0	8	12.5	25.0	25.0	12.5	0.0	25.0
	Migrant	3	0.0	66.7	0.0	0.0	0.0	33.3	3	0.0	66.7	0.0	0.0	33.3	0.0
	Autism	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
Primary Disability	Other health impairment	4	0.0	75.0	0.0	0.0	0.0	25.0	4	0.0	50.0	25.0	0.0	0.0	25.0
	Specific learning disability	3	0.0	0.0	33.3	33.3	0.0	33.3	3	0.0	0.0	33.3	33.3	0.0	33.3

Table S2.9: Screener Performance Level by Domain - Grade 8 (cont.)

Cub and a	C4-14-1-			Li	stening						R	eading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,273	18.1	39.3	8.7	14.3	5.9	13.7	1,273	18.1	45.9	10.8	14.2	4.1	6
	Female	520	18.1	37.9	9.4	14.4	6.3	13.8	520	18.1	44.4	11.3	15.8	2.9	7
Gender	Male	670	17.9	40.9	8.5	14.5	5.2	13.0	670	17.9	47.6	10.6	13.1	4.9	5
	Missing	83	20.5	34.9	6.0	12.0	8.4	18.1	83	20.5	41.0	9.6	13.3	4.8	10
	American Indian or Alaskan Native	1	0.0	0.0	0.0	0.0	100.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0
	Asian	150	1.3	22.0	13.3	22.0	12.0	29.3	150	1.3	29.3	20.0	23.3	9.3	16
	Black or African American	255	12.9	32.9	11.8	22.0	7.5	12.9	255	12.9	42.0	16.9	19.6	2.4	6
Ethnicity	Hispanic or Latino	518	22.4	51.5	6.2	8.3	3.3	8.3	518	22.4	57.3	4.8	9.1	2.5	3
	Native Hawaiian or Other Pacific Islander	11	9.1	63.6	9.1	9.1	9.1	0.0	11	9.1	72.7	9.1	9.1	0.0	0
	Two or More Races	192	30.7	39.6	8.9	8.9	3.6	8.3	192	30.7	44.3	10.4	7.3	2.1	5
	White	120	12.5	24.2	9.2	21.7	7.5	25.0	120	12.5	31.7	13.3	21.7	10.0	10
	Other/Unknown	26	19.2	15.4	0.0	23.1	11.5	30.8	26	19.2	19.2	11.5	26.9	11.5	11
	Gifted	0							0						
Other	IEP	8	0.0	37.5	25.0	25.0	0.0	12.5	8	0.0	62.5	25.0	0.0	0.0	12
	Migrant	4	0.0	100.0	0.0	0.0	0.0	0.0	4	0.0	75.0	25.0	0.0	0.0	0
	Intellectual Disability	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0
	Multiple disabilities	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0
Primary Disability	Specific learning disability	6	0.0	33.3	16.7	50.0	0.0	0.0	6	0.0	50.0	33.3	16.7	0.0	0
	Speech or language impairment	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	0.0	100

Table S2.10: Screener Performance Level by Domain - Grade 9

0	<u> </u>		·	SI	peaking	<i>(cont</i>	,				١	Vriting			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		1,273	18.1	41.2	10.0	10.8	2.7	17.1	1,273	18.1	46.7	9.3	12.0	3.7	10
	Female	520	18.1	38.8	12.5	10.4	2.5	17.7	520	18.1	45.2	11.2	11.9	3.1	10.
Gender	Male	670	17.9	43.6	8.4	11.6	2.4	16.1	670	17.9	48.7	7.9	12.2	3.9	9.
	Missing	83	20.5	37.3	7.2	7.2	6.0	21.7	83	20.5	39.8	9.6	10.8	6.0	13
	American Indian or Alaskan Native	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	100.0	0.0	0.0	0
	Asian	150	1.3	24.0	14.7	19.3	5.3	35.3	150	1.3	30.0	17.3	23.3	6.7	21
	Black or African American	255	12.9	32.2	15.7	19.6	0.8	18.8	255	12.9	43.1	13.7	15.3	5.5	9.
Ethnicity	Hispanic or Latino	518	22.4	55.2	4.8	6.2	2.3	9.1	518	22.4	57.5	5.0	7.1	2.3	5
	Native Hawaiian or Other Pacific Islander	11	9.1	63.6	0.0	18.2	9.1	0.0	11	9.1	72.7	0.0	18.2	0.0	0
	Two or More Races	192	30.7	41.7	8.3	5.7	2.1	11.5	192	30.7	45.8	5.7	8.9	1.0	7.
	White	120	12.5	24.2	17.5	10.0	5.8	30.0	120	12.5	34.2	13.3	14.2	6.7	19
	Other/Unknown	26	19.2	19.2	11.5	7.7	0.0	42.3	26	19.2	15.4	15.4	23.1	3.8	23
	Gifted	0							0						
Other	IEP	8	0.0	25.0	0.0	62.5	0.0	12.5	8	0.0	62.5	12.5	12.5	0.0	12
	Migrant	4	0.0	75.0	25.0	0.0	0.0	0.0	4	0.0	100.0	0.0	0.0	0.0	0.
	Intellectual Disability	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.
	Multiple disabilities	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.
Primary Disability	Specific learning disability	6	0.0	16.7	0.0	50.0	0.0	33.3	6	0.0	50.0	0.0	50.0	0.0	0.
	Speech or language impairment	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	0.0	100.

Table S2.10: Screener Performance Level by Domain - Grade 9 (cont.)

0	04-4		2	Li	stening						R	eading			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		676	9.6	29.7	11.7	19.1	10.8	19.1	676	9.6	38.0	15.2	21.0	6.4	9.8
	Female	298	10.1	27.5	13.1	18.5	10.4	20.5	298	10.1	37.2	14.4	22.5	7.0	8.7
Gender	Male	327	10.1	30.0	10.4	20.5	11.0	18.0	327	10.1	36.4	17.1	20.5	5.5	10.4
	Missing	51	3.9	41.2	11.8	13.7	11.8	17.6	51	3.9	52.9	7.8	15.7	7.8	11.8
	American Indian or Alaskan Native	2	0.0	100.0	0.0	0.0	0.0	0.0	2	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	108	3.7	13.9	18.5	24.1	10.2	29.6	108	3.7	26.9	20.4	21.3	7.4	20.4
	Black or African American	148	3.4	18.2	14.9	22.3	17.6	23.6	148	3.4	28.4	20.9	27.0	12.8	7.4
Ethnicity	Hispanic or Latino	212	17.5	44.3	7.1	15.6	5.2	10.4	212	17.5	50.0	10.8	13.2	2.8	5.7
,	Native Hawaiian or Other Pacific Islander	3	0.0	33.3	0.0	66.7	0.0	0.0	3	0.0	33.3	33.3	33.3	0.0	0.0
	Two or More Races	103	14.6	37.9	6.8	16.5	10.7	13.6	103	14.6	42.7	10.7	23.3	2.9	5.8
	White	86	1.2	24.4	16.3	20.9	15.1	22.1	86	1.2	36.0	16.3	27.9	5.8	12.8
	Other/Unknown	14	21.4	14.3	7.1	0.0	7.1	50.0	14	21.4	14.3	7.1	14.3	14.3	28.6
Other	IEP	4	25.0	25.0	0.0	50.0	0.0	0.0	4	25.0	25.0	25.0	25.0	0.0	0.0
	Developmental delay	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
	Emotional disturbance	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
Primary Disability	Intellectual Disability	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
	Other health impairment	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0.0
	Specific learning disability	2	0.0	0.0	0.0	50.0	50.0	0.0	2	0.0	0.0	50.0	50.0	0.0	0.0

Table S2.11: Screener Performance Level by Domain - Grade 10

0	04-4		2	S	peaking	10 (001	,				١	Vriting			
Subgroup	Status –	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		676	9.6	32.5	16.1	13.2	4.3	24.3	676	9.6	37.0	15.5	16.6	6.8	14.5
	Female	298	10.1	29.2	17.8	13.1	4.4	25.5	298	10.1	36.2	13.8	17.8	7.0	15.1
Gender	Male	327	10.1	33.9	15.3	13.1	4.9	22.6	327	10.1	35.8	18.3	15.0	7.0	13.8
	Missing	51	3.9	43.1	11.8	13.7	0.0	27.5	51	3.9	49.0	7.8	19.6	3.9	15.7
	American Indian or Alaskan Native	2	0.0	100.0	0.0	0.0	0.0	0.0	2	0.0	100.0	0.0	0.0	0.0	0.0
	Asian	108	3.7	21.3	15.7	19.4	0.9	38.9	108	3.7	25.9	21.3	18.5	7.4	23.1
	Black or African American	148	3.4	18.2	23.0	17.6	6.1	31.8	148	3.4	24.3	23.0	19.6	14.2	15.5
Ethnicity	Hispanic or Latino	212	17.5	50.9	9.9	5.7	2.8	13.2	212	17.5	50.0	9.9	12.3	1.9	8.5
Lumony	Native Hawaiian or Other Pacific Islander	3	0.0	33.3	0.0	0.0	33.3	33.3	3	0.0	33.3	33.3	33.3	0.0	0.0
	Two or More Races	103	14.6	34.0	16.5	15.5	2.9	16.5	103	14.6	43.7	9.7	16.5	5.8	9.7
	White	86	1.2	25.6	22.1	15.1	5.8	30.2	86	1.2	34.9	17.4	20.9	7.0	18.6
	Other/Unknown	14	21.4	14.3	7.1	7.1	28.6	21.4	14	21.4	14.3	7.1	7.1	7.1	42.9
Other	IEP	4	25.0	25.0	25.0	25.0	0.0	0.0	4	25.0	25.0	0.0	50.0	0.0	0.0
	Developmental delay	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
	Emotional disturbance	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0
Primary Disability	Intellectual Disability	1	100.0	0.0	0.0	0.0	0.0	0.0	1	100.0	0.0	0.0	0.0	0.0	0.0
	Other health impairment	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0.0
	Specific learning disability	2	0.0	0.0	0.0	50.0	0.0	50.0	2	0.0	0.0	0.0	50.0	50.0	0.0

Table S2.11: Screener Performance Level by Domain - Grade 10 (cont.)

Quibarrour	64-4			Li	stening						R	leading			
Subgroup	Status –	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		414	6.3	23.7	10.1	20.8	9.2	30.0	414	6.3	30.2	16.9	23.7	8.0	15.0
	Female	198	6.1	26.8	10.1	20.2	7.1	29.8	198	6.1	34.8	15.7	20.7	8.1	14.6
Gender	Male	180	7.2	20.0	9.4	21.1	11.7	30.6	180	7.2	26.1	16.7	27.8	7.8	14.4
	Missing	36	2.8	25.0	13.9	22.2	8.3	27.8	36	2.8	25.0	25.0	19.4	8.3	19.4
	Asian	73	2.7	11.0	9.6	30.1	11.0	35.6	73	2.7	17.8	16.4	28.8	8.2	26.0
	Black or African American	91	3.3	19.8	16.5	25.3	13.2	22.0	91	3.3	27.5	25.3	31.9	6.6	5.5
	Hispanic or Latino	143	13.3	39.2	9.1	9.8	4.2	24.5	143	13.3	46.2	8.4	13.3	7.0	11.9
Ethnicity	Native Hawaiian or Other Pacific Islander	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
	Two or More Races	24	8.3	29.2	0.0	25.0	8.3	29.2	24	8.3	29.2	16.7	25.0	0.0	20.8
	White	72	0.0	12.5	8.3	22.2	11.1	45.8	72	0.0	18.1	20.8	27.8	12.5	20.8
	Other/Unknown	10	0.0	0.0	10.0	40.0	20.0	30.0	10	0.0	10.0	30.0	30.0	20.0	10.0
Other	IEP	3	33.3	0.0	33.3	33.3	0.0	0.0	3	33.3	0.0	66.7	0.0	0.0	0.0
	Intellectual Disability	2	50.0	0.0	50.0	0.0	0.0	0.0	2	50.0	0.0	50.0	0.0	0.0	0.0
Primary Disability	Other health impairment	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
	Specific learning disability	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	0.0	100.0

Table S2.12: Screener Performance Level by Domain - Grade 11

Cubana	64-4			S	peaking						١	Vriting			
Subgroup	Status –	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		414	6.3	25.4	15.2	14.5	4.8	33.8	414	6.3	30.4	14.5	20.3	7.0	21.5
	Female	198	6.1	29.3	11.6	16.7	4.5	31.8	198	6.1	34.8	13.1	17.2	5.6	23.2
Gender	Male	180	7.2	22.8	16.1	12.2	5.0	36.7	180	7.2	26.1	15.0	23.9	8.9	18.9
	Missing	36	2.8	16.7	30.6	13.9	5.6	30.6	36	2.8	27.8	19.4	19.4	5.6	25.0
	Asian	73	2.7	13.7	17.8	20.5	2.7	42.5	73	2.7	17.8	17.8	26.0	4.1	31.5
	Black or African American	91	3.3	17.6	20.9	24.2	3.3	30.8	91	3.3	27.5	22.0	24.2	11.0	12.1
	Hispanic or Latino	143	13.3	41.3	10.5	6.3	4.2	24.5	143	13.3	46.9	7.0	9.1	7.0	16.8
Ethnicity	Native Hawaiian or Other Pacific Islander	1	0.0	0.0	100.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
	Two or More Races	24	8.3	33.3	4.2	12.5	4.2	37.5	24	8.3	29.2	8.3	29.2	4.2	20.8
	White	72	0.0	15.3	16.7	13.9	11.1	43.1	72	0.0	18.1	16.7	25.0	5.6	34.7
	Other/Unknown	10	0.0	10.0	20.0	10.0	0.0	60.0	10	0.0	10.0	20.0	50.0	10.0	10.0
Other	IEP	3	33.3	33.3	33.3	0.0	0.0	0.0	3	33.3	33.3	33.3	0.0	0.0	0.0
	Intellectual Disability	2	50.0	0.0	50.0	0.0	0.0	0.0	2	50.0	50.0	0.0	0.0	0.0	0.0
Primary Disability	Other health impairment	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	0.0	100.0	0.0	0.0	0.0
	Specific learning disability	1	0.0	0.0	0.0	0.0	0.0	100.0	1	0.0	0.0	0.0	0.0	0.0	100.0

Table S2.12: Screener Performance Level by Domain - Grade 11 (cont.)

Cubana	<u> </u>			Li	stening						R	eading			
Subgroup	Status –	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		249	7.6	16.1	8.8	25.3	10.0	32.1	249	7.6	21.7	15.7	30.9	8.8	15.3
	Female	117	4.3	10.3	12.8	31.6	9.4	31.6	117	4.3	17.1	20.5	32.5	10.3	15.4
Gender	Male	116	12.1	20.7	4.3	19.0	11.2	32.8	116	12.1	24.1	10.3	29.3	6.9	17.
	Missing	16	0.0	25.0	12.5	25.0	6.3	31.3	16	0.0	37.5	18.8	31.3	12.5	0.0
	Asian	45	0.0	4.4	8.9	24.4	15.6	46.7	45	0.0	11.1	11.1	37.8	17.8	22.2
	Black or African American	50	2.0	16.0	16.0	34.0	8.0	24.0	50	2.0	24.0	22.0	30.0	8.0	14.(
	Hispanic or Latino	79	19.0	32.9	6.3	17.7	6.3	17.7	79	19.0	36.7	15.2	16.5	3.8	8.9
Ethnicity	Native Hawaiian or Other Pacific Islander	2	0.0	0.0	0.0	50.0	0.0	50.0	2	0.0	0.0	50.0	0.0	50.0	0.0
	Two or More Races	13	7.7	0.0	0.0	23.1	7.7	61.5	13	7.7	0.0	0.0	46.2	7.7	38.5
	White	47	2.1	8.5	6.4	27.7	14.9	40.4	47	2.1	17.0	12.8	46.8	4.3	17.0
	Other/Unknown	13	7.7	0.0	15.4	30.8	7.7	38.5	13	7.7	0.0	30.8	30.8	23.1	7.7
Other	IEP	3	0.0	66.7	0.0	33.3	0.0	0.0	3	0.0	66.7	0.0	33.3	0.0	0.0
riman, Diaphility	Other health impairment	1	0.0	0.0	0.0	100.0	0.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0.0
Primary Disability	Specific learning disability	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0

Table S2.13: Screener Performance Level by Domain - Grade 12

Cubana	Ctotuo.		2	SI	peaking		,				١	Vriting			
Subgroup	Status -	N	0	1	2	3	4	5	N	0	1	2	3	4	5
Total		249	7.6	18.5	15.3	16.5	6.8	35.3	249	7.6	22.9	16.9	20.5	10.0	22.1
	Female	117	4.3	13.7	21.4	18.8	6.8	35.0	117	4.3	20.5	20.5	24.8	9.4	20.5
Gender	Male	116	12.1	22.4	9.5	13.8	5.2	37.1	116	12.1	23.3	13.8	17.2	9.5	24.1
	Missing	16	0.0	25.0	12.5	18.8	18.8	25.0	16	0.0	37.5	12.5	12.5	18.8	18.8
	Asian	45	0.0	4.4	13.3	20.0	8.9	53.3	45	0.0	8.9	15.6	33.3	11.1	31.1
	Black or African American	50	2.0	22.0	20.0	20.0	8.0	28.0	50	2.0	28.0	18.0	26.0	10.0	16.0
	Hispanic or Latino	79	19.0	32.9	10.1	13.9	6.3	17.7	79	19.0	39.2	15.2	7.6	6.3	12.7
Ethnicity	Native Hawaiian or Other Pacific Islander	2	0.0	0.0	0.0	50.0	0.0	50.0	2	0.0	0.0	50.0	0.0	0.0	50.0
	Two or More Races	13	7.7	0.0	15.4	0.0	0.0	76.9	13	7.7	0.0	7.7	15.4	15.4	53.8
	White	47	2.1	12.8	21.3	17.0	4.3	42.6	47	2.1	17.0	17.0	27.7	12.8	23.4
	Other/Unknown	13	7.7	7.7	15.4	15.4	15.4	38.5	13	7.7	0.0	30.8	15.4	15.4	30.8
Other	IEP	3	0.0	33.3	0.0	33.3	33.3	0.0	3	0.0	66.7	0.0	33.3	0.0	0.0
Primary Disability	Other health impairment	1	0.0	0.0	0.0	0.0	100.0	0.0	1	0.0	0.0	0.0	100.0	0.0	0.0
	Specific learning disability	1	0.0	100.0	0.0	0.0	0.0	0.0	1	0.0	100.0	0.0	0.0	0.0	0.0

Table S2.13: Screener Performance Level by Domain - Grade 12 (cont.)

Section 3: Screener Assessment - Percentage of Students by Overall Proficiency Level

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		9,965	28.6	64.8	2.5	4.0
	Female	4,493	27.0	66.8	2.6	3.6
Gender	Male	4,682	30.2	62.6	2.6	4.7
	Missing	790	28.4	66.7	1.9	3.0
	American Indian or Alaskan Native	24	45.8	54.2	0.0	0.0
	Asian	2,492	23.6	67.9	6.0	2.5
	Black or African American	1,797	23.9	70.4	1.9	3.8
Etheriste	Hispanic or Latino	2,670	36.9	57.8	0.4	4.8
Ethnicity	Native Hawaiian or Other Pacific Islander	46	13.0	82.6	0.0	4.3
	Two or More Races	1,034	31.5	58.6	1.5	8.4
	White	1,671	27.3	67.3	2.3	3.1
	Other/Unknown	231	20.8	76.2	1.3	1.7
	Gifted	23	21.7	56.5	21.7	0.0
Other	IEP	131	47.3	44.3	0.0	8.4
	Migrant	9	33.3	66.7	0.0	0.0
	Autism	38	57.9	26.3	0.0	15.8
	Developmental delay	5	40.0	60.0	0.0	0.0
	Emotional disturbance	1	100.0	0.0	0.0	0.0
Primary Disability	Hearing Impaired	3	66.7	33.3	0.0	0.0
	Intellectual Disability	5	80.0	20.0	0.0	0.0
	Multiple disabilities	9	55.6	11.1	0.0	33.3
	Orthopedic impairment	2	0.0	50.0	0.0	50.0

Table S3.1: Screener Overall Proficiency Levels - Kindergarten

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
	Other health impairment	7	28.6	57.1	0.0	14.3
	Specific learning disability	7	85.7	14.3	0.0	0.0
	Speech or language impairment	65	35.4	61.5	0.0	3.1

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		1,610	29.4	54.3	10.9	5.3
	Female	715	27.6	53.8	11.6	7.0
Gender	Male	756	31.6	54.0	9.9	4.5
	Missing	139	27.3	58.3	12.9	1.4
	American Indian or Alaskan Native	3	0.0	100.0	0.0	0.0
	Asian	454	18.5	57.9	22.7	0.9
	Black or African American	275	21.5	64.4	9.8	4.4
	Hispanic or Latino	428	42.5	44.4	3.7	9.3
Ethnicity	Native Hawaiian or Other Pacific Islander	10	30.0	60.0	10.0	0.0
	Two or More Races	165	39.4	43.6	4.2	12.7
	White	257	28.0	60.3	8.2	3.5
	Other/Unknown	18	50.0	44.4	5.6	0.0
	Gifted	9	0.0	66.7	33.3	0.0
Other	IEP	12	41.7	58.3	0.0	0.0
	Migrant	7	42.9	57.1	0.0	0.0
	Autism	4	25.0	50.0	0.0	25.0
	Emotional disturbance	1	100.0	0.0	0.0	0.0
Primary Disability	Orthopedic impairment	1	100.0	0.0	0.0	0.0
	Other health impairment	1	100.0	0.0	0.0	0.0
	Specific learning disability	1	100.0	0.0	0.0	0.0
	Speech or language impairment	5	0.0	100.0	0.0	0.0

Table S3.2: Screener Overall Proficiency Levels - Grade 1

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		1,235	32.3	47.3	14.3	6.1
	Female	515	29.7	47.8	15.9	6.6
Gender	Male	635	34.6	46.1	12.9	6.3
	Missing	85	30.6	52.9	15.3	1.2
	American Indian or Alaskan Native	3	0.0	100.0	0.0	0.0
	Asian	284	27.1	47.9	23.6	1.4
	Black or African American	230	22.2	57.4	17.4	3.0
	Hispanic or Latino	353	41.4	41.6	5.4	11.6
Ethnicity	Native Hawaiian or Other Pacific Islander	8	37.5	50.0	12.5	0.0
	Two or More Races	144	37.5	41.7	7.6	13.2
	White	195	30.8	49.7	17.4	2.1
	Other/Unknown	18	44.4	27.8	27.8	0.0
	Gifted	19	5.3	63.2	31.6	0.0
Other	IEP	9	33.3	55.6	0.0	11.1
	Migrant	1	0.0	100.0	0.0	0.0
	Autism	1	0.0	100.0	0.0	0.0
	Hearing Impaired	1	100.0	0.0	0.0	0.0
Primary Disability	Multiple disabilities	2	50.0	0.0	0.0	50.0
	Speech or language impairment	4	25.0	75.0	0.0	0.0

Table S3.3: Screener Overall Proficiency Levels - Grade 2

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		1,076	34.3	43.9	15.0	6.9
	Female	478	30.8	44.4	16.9	7.9
Gender	Male	528	36.0	44.3	13.1	6.6
	Missing	70	45.7	37.1	15.7	1.4
	American Indian or Alaskan Native	2	0.0	50.0	50.0	0.0
	Asian	228	21.9	45.6	31.1	1.3
	Black or African American	216	31.9	50.0	11.1	6.9
	Hispanic or Latino	318	45.3	36.5	7.2	11.0
Ethnicity	Native Hawaiian or Other Pacific Islander	6	16.7	83.3	0.0	0.0
	Two or More Races	146	38.4	43.8	8.2	9.6
	White	145	31.0	43.4	20.7	4.8
	Other/Unknown	15	26.7	73.3	0.0	0.0
	Gifted	3	0.0	33.3	66.7	0.0
Other	IEP	8	25.0	62.5	0.0	12.5
	Migrant	3	66.7	33.3	0.0	0.0
	Autism	1	0.0	100.0	0.0	0.0
	Intellectual Disability	1	0.0	100.0	0.0	0.0
Drimon Diach III	Multiple disabilities	1	100.0	0.0	0.0	0.0
Primary Disability	Other health impairment	3	33.3	66.7	0.0	0.0
	Specific learning disability	2	50.0	0.0	0.0	50.0
	Speech or language impairment	2	0.0	100.0	0.0	0.0

Table S3.4: Screener Overall Proficiency Levels - Grade 3

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		911	32.9	30.4	27.8	8.9
	Female	415	29.4	31.3	30.6	8.7
Gender	Male	432	36.8	29.6	24.3	9.3
	Missing	64	29.7	29.7	32.8	7.8
	American Indian or Alaskan Native	5	20.0	40.0	20.0	20.0
	Asian	186	16.7	36.0	45.2	2.2
	Black or African American	170	24.1	38.8	30.6	6.5
	Hispanic or Latino	281	44.8	26.0	15.3	13.9
Ethnicity	Native Hawaiian or Other Pacific Islander	5	40.0	20.0	40.0	0.0
	Two or More Races	119	40.3	27.7	19.3	12.6
	White	132	35.6	22.0	34.1	8.3
	Other/Unknown	13	30.8	46.2	23.1	0.0
	Gifted	6	16.7	16.7	66.7	0.0
Other	IEP	11	18.2	27.3	27.3	27.3
	Migrant	3	66.7	33.3	0.0	0.0
	Autism	3	0.0	33.3	0.0	66.7
	Emotional disturbance	1	100.0	0.0	0.0	0.0
	Hearing Impaired	1	0.0	0.0	100.0	0.0
Primary Disability	Intellectual Disability	1	0.0	0.0	0.0	100.0
	Multiple disabilities	1	100.0	0.0	0.0	0.0
	Orthopedic impairment	1	0.0	0.0	100.0	0.0
	Other health impairment	1	0.0	100.0	0.0	0.0

Table S3.5: Screener Overall Proficiency Levels - Grade 4

Subgroup	Status	Ν	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
	Specific learning disability	2	50.0	0.0	50.0	0.0
	Speech or language impairment	2	0.0	100.0	0.0	0.0

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		912	33.4	33.6	24.5	8.6
	Female	400	32.3	33.0	25.5	9.3
Gender	Male	456	34.0	34.2	23.5	8.3
	Missing	56	37.5	32.1	25.0	5.4
	American Indian or Alaskan Native	1	100.0	0.0	0.0	0.0
	Asian	179	22.9	39.1	35.2	2.8
	Black or African American	183	30.1	38.8	23.5	7.7
	Hispanic or Latino	264	40.9	29.2	14.0	15.9
Ethnicity	Native Hawaiian or Other Pacific Islander	8	37.5	37.5	12.5	12.5
	Two or More Races	119	31.9	32.8	26.9	8.4
	White	150	37.3	29.3	30.0	3.3
	Other/Unknown	8	37.5	25.0	25.0	12.5
	Gifted	8	12.5	37.5	50.0	0.0
Other	IEP	6	33.3	50.0	16.7	0.0
	Migrant	1	0.0	0.0	100.0	0.0
	Emotional disturbance	2	50.0	0.0	50.0	0.0
Dulana Dia L''''	Multiple disabilities	1	100.0	0.0	0.0	0.0
Primary Disability	Other health impairment	1	0.0	100.0	0.0	0.0
	Specific learning disability	2	0.0	100.0	0.0	0.0

Table S3.6: Screener Overall Proficiency Levels - Grade 5

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		771	29.4	33.3	24.8	12.5
	Female	342	26.6	31.9	28.7	12.9
Gender	Male	369	31.4	33.9	22.0	12.7
	Missing	60	33.3	38.3	20.0	8.3
	American Indian or Alaskan Native	4	25.0	50.0	25.0	0.0
	Asian	129	18.6	30.2	48.1	3.1
	Black or African American	166	25.3	39.8	23.5	11.4
	Hispanic or Latino	282	36.5	30.5	14.5	18.4
Ethnicity	Native Hawaiian or Other Pacific Islander	2	50.0	50.0	0.0	0.0
	Two or More Races	66	31.8	34.8	15.2	18.2
	White	112	28.6	31.3	33.0	7.1
	Other/Unknown	10	30.0	50.0	10.0	10.0
	Gifted	4	0.0	50.0	50.0	0.0
Other	IEP	5	20.0	80.0	0.0	0.0
	Migrant	4	25.0	50.0	25.0	0.0
Primary Disability	Autism	1	0.0	100.0	0.0	0.0
	Intellectual Disability	1	100.0	0.0	0.0	0.0
	Specific learning disability	3	0.0	100.0	0.0	0.0

Table S3.7: Screener Overall Proficiency Levels - Grade 6

Subgroup	Status	Ν	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		829	36.9	24.5	19.8	18.8
	Female	392	34.7	24.0	22.2	19.1
Gender	Male	393	39.4	24.9	16.5	19.1
	Missing	44	34.1	25.0	27.3	13.6
	American Indian or Alaskan Native	1	0.0	0.0	0.0	100.0
	Asian	123	23.6	33.3	41.5	1.6
	Black or African American	155	32.3	32.9	23.2	11.6
	Hispanic or Latino	327	41.9	16.5	9.5	32.1
Ethnicity	Native Hawaiian or Other Pacific Islander	5	80.0	20.0	0.0	0.0
	Two or More Races	103	42.7	22.3	17.5	17.5
	White	109	36.7	29.4	24.8	9.2
	Other/Unknown	6	33.3	16.7	16.7	33.3
	Gifted	1	0.0	0.0	100.0	0.0
Other	IEP	10	10.0	50.0	10.0	30.0
	Migrant	3	33.3	33.3	33.3	0.0
	Autism	2	0.0	0.0	50.0	50.0
Diana Diantaria	Intellectual Disability	2	0.0	50.0	0.0	50.0
Primary Disability	Other health impairment	3	0.0	66.7	0.0	33.3
	Specific learning disability	3	33.3	66.7	0.0	0.0

Table S3.8: Screener Overall Proficiency Levels - Grade 7

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		682	39.9	31.4	13.3	15.4
	Female	292	37.7	35.6	13.7	13.0
Gender	Male	346	42.5	26.9	13.0	17.6
	Missing	44	34.1	38.6	13.6	13.6
	American Indian or Alaskan Native	1	100.0	0.0	0.0	0.0
	Asian	106	31.1	38.7	26.4	3.8
	Black or African American	127	28.3	48.0	10.2	13.4
	Hispanic or Latino	232	48.7	23.3	9.9	18.1
Ethnicity	Native Hawaiian or Other Pacific Islander	3	66.7	33.3	0.0	0.0
	Two or More Races	108	39.8	21.3	8.3	30.6
	White	98	40.8	33.7	18.4	7.1
	Other/Unknown	7	57.1	14.3	0.0	28.6
	Gifted	2	0.0	100.0	0.0	0.0
Other	IEP	8	37.5	25.0	25.0	12.5
	Migrant	3	66.7	33.3	0.0	0.0
Primary Disability	Autism	1	0.0	0.0	0.0	100.0
	Other health impairment	4	75.0	0.0	25.0	0.0
	Specific learning disability	3	0.0	66.7	33.3	0.0

Table S3.9: Screener Overall Proficiency Levels - Grade 8

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		1,273	45.8	25.9	10.1	18.1
	Female	520	45.4	26.7	9.8	18.1
Gender	Male	670	46.9	25.5	9.7	17.9
	Missing	83	39.8	24.1	15.7	20.5
	American Indian or Alaskan Native	1	0.0	100.0	0.0	0.0
	Asian	150	32.0	42.0	24.7	1.3
	Black or African American	255	40.4	38.0	8.6	12.9
	Hispanic or Latino	518	56.2	15.4	6.0	22.4
Ethnicity	Native Hawaiian or Other Pacific Islander	11	63.6	27.3	0.0	9.1
	Two or More Races	192	46.9	15.6	6.8	30.7
	White	120	33.3	36.7	17.5	12.5
	Other/Unknown	26	15.4	46.2	19.2	19.2
Other	IEP	8	25.0	62.5	12.5	0.0
Other	Migrant	4	100.0	0.0	0.0	0.0
	Intellectual Disability	1	0.0	100.0	0.0	0.0
Primary Disability	Multiple disabilities	1	100.0	0.0	0.0	0.0
	Specific learning disability	6	16.7	83.3	0.0	0.0
	Speech or language impairment	1	0.0	0.0	100.0	0.0

Table S3.10: Screener Overall Proficiency Levels - Grade 9

Subgroup	Status	Ν	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		676	39.2	36.1	15.1	9.6
	Female	298	37.6	37.9	14.4	10.1
Gender	Male	327	38.8	36.1	15.0	10.1
	Missing	51	51.0	25.5	19.6	3.9
	American Indian or Alaskan Native	2	100.0	0.0	0.0	0.0
	Asian	108	28.7	42.6	25.0	3.7
	Black or African American	148	29.7	48.0	18.9	3.4
	Hispanic or Latino	212	50.9	23.6	8.0	17.5
Ethnicity	Native Hawaiian or Other Pacific Islander	3	33.3	66.7	0.0	0.0
	Two or More Races	103	42.7	35.0	7.8	14.6
	White	86	37.2	43.0	18.6	1.2
	Other/Unknown	14	21.4	14.3	42.9	21.4
Other	IEP	4	25.0	50.0	0.0	25.0
	Developmental delay	1	0.0	0.0	0.0	100.0
	Emotional disturbance	1	100.0	0.0	0.0	0.0
Primary Disability	Intellectual Disability	1	0.0	0.0	0.0	100.0
	Other health impairment	1	0.0	100.0	0.0	0.0
	Specific learning disability	2	0.0	100.0	0.0	0.0

Table S3.11: Screener Overall Proficiency Levels - Grade 10

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		414	31.9	40.3	21.5	6.3
	Female	198	34.3	38.4	21.2	6.1
Gender	Male	180	28.3	43.9	20.6	7.2
	Missing	36	36.1	33.3	27.8	2.8
	Asian	73	17.8	47.9	31.5	2.7
	Black or African American	91	31.9	52.7	12.1	3.3
	Hispanic or Latino	143	47.6	21.7	17.5	13.3
Ethnicity	Native Hawaiian or Other Pacific Islander	1	0.0	100.0	0.0	0.0
	Two or More Races	24	29.2	41.7	20.8	8.3
	White	72	19.4	48.6	31.9	0.0
	Other/Unknown	10	10.0	70.0	20.0	0.0
Other	IEP	3	33.3	33.3	0.0	33.3
	Intellectual Disability	2	50.0	0.0	0.0	50.0
Primary Disability	Other health impairment	1	0.0	100.0	0.0	0.0
	Specific learning disability	1	0.0	0.0	100.0	0.0

Table S3.12: Screener Overall Proficiency Levels - Grade 11

Subgroup	Status	N	Emerging	Progressing	Proficient	Proficiency Not Demonstrated
Total		249	22.5	47.4	22.5	7.6
	Female	117	20.5	52.1	23.1	4.3
Gender	Male	116	23.3	41.4	23.3	12.1
	Missing	16	31.3	56.3	12.5	0.0
	Asian	45	8.9	60.0	31.1	0.0
	Black or African American	50	30.0	46.0	22.0	2.0
	Hispanic or Latino	79	35.4	32.9	12.7	19.0
Ethnicity	Native Hawaiian or Other Pacific Islander	2	0.0	50.0	50.0	0.0
	Two or More Races	13	0.0	46.2	46.2	7.7
	White	47	14.9	61.7	21.3	2.1
	Other/Unknown	13	15.4	46.2	30.8	7.7
Other	IEP	3	33.3	66.7	0.0	0.0
Primary Disability	Other health impairment	1	0.0	100.0	0.0	0.0
Filling Disability	Specific learning disability	1	100.0	0.0	0.0	0.0

Table S3.13: Screener Overall Proficiency Levels - Grade 12

Section 4: Screener Assessment - Conditional Standard Error of Measurement (CSEM)

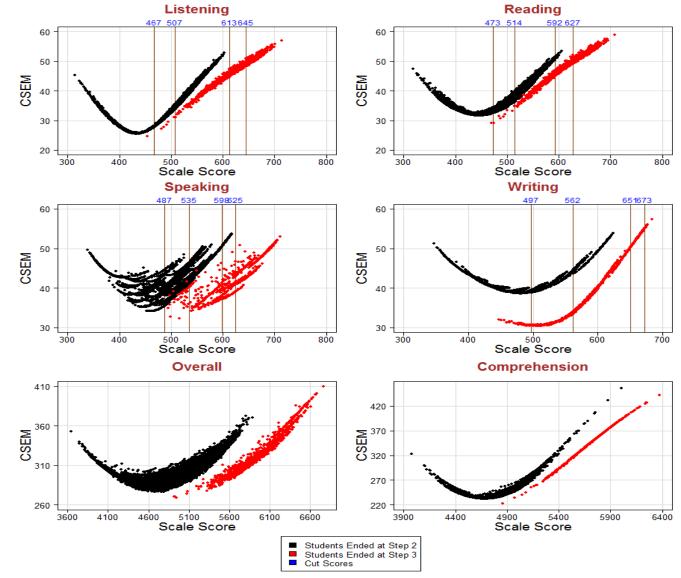


Figure S4.1: Screener Conditional Standard Error of Measurement for Kindergarten

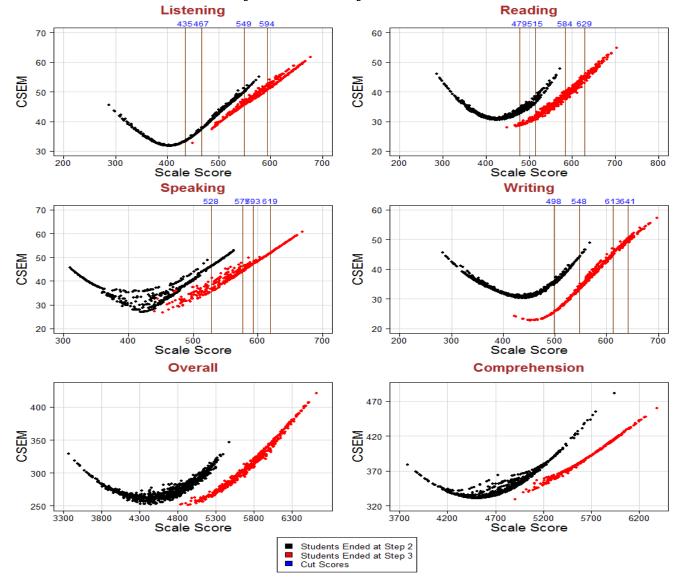


Figure S4.2: Screener Conditional Standard Error of Measurement for Grade 1

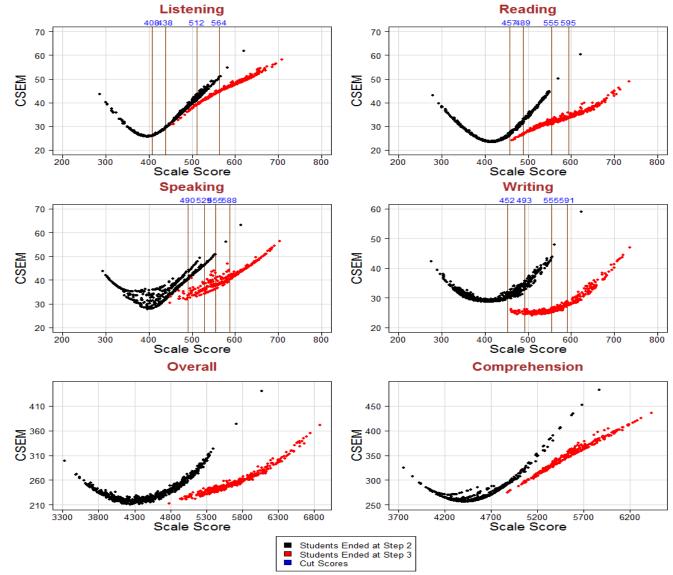


Figure S4.3: Screener Conditional Standard Error of Measurement for Grade 2

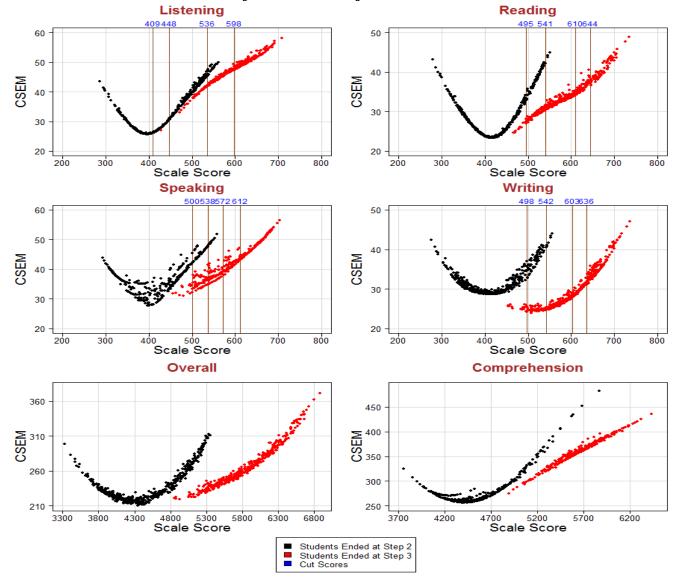


Figure S4.4: Screener Conditional Standard Error of Measurement for Grade 3

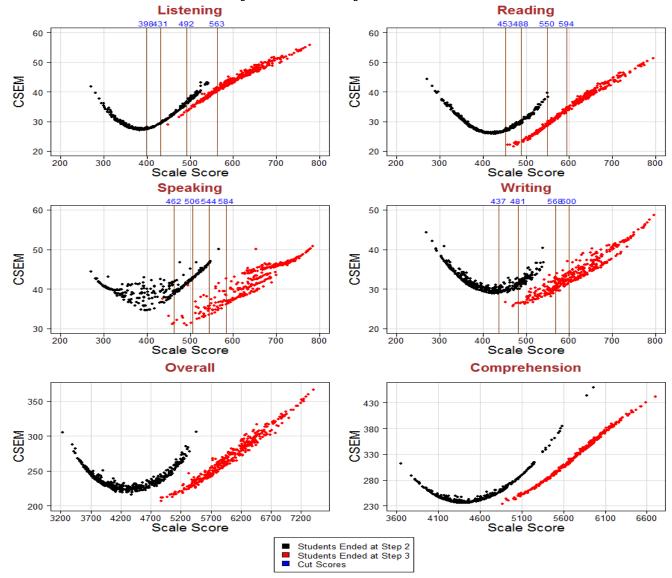


Figure S4.5: Screener Conditional Standard Error of Measurement for Grade 4

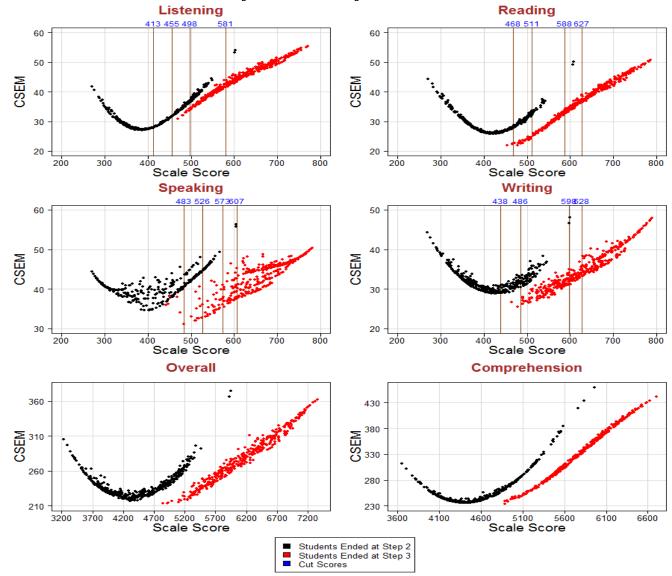


Figure S4.6: Screener Conditional Standard Error of Measurement for Grade 5

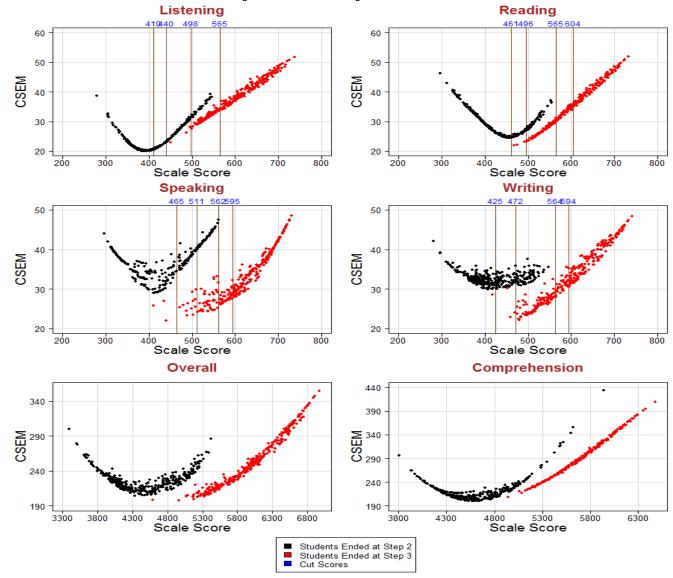


Figure S4.7: Screener Conditional Standard Error of Measurement for Grade 6

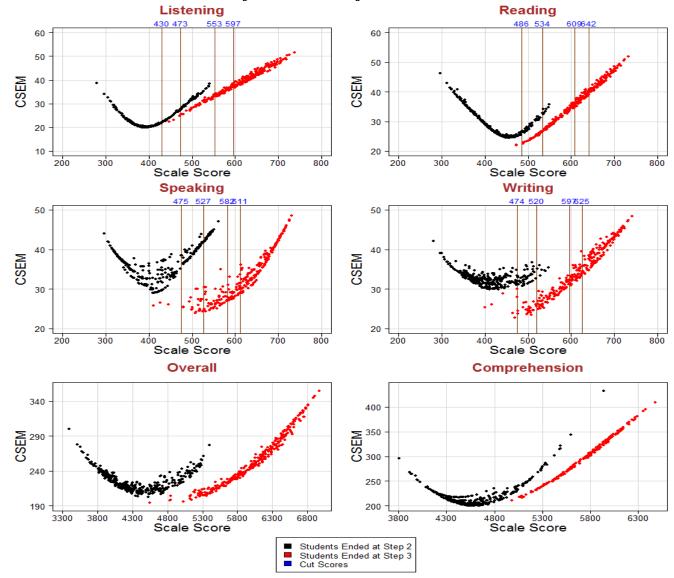


Figure S4.8: Screener Conditional Standard Error of Measurement for Grade 7

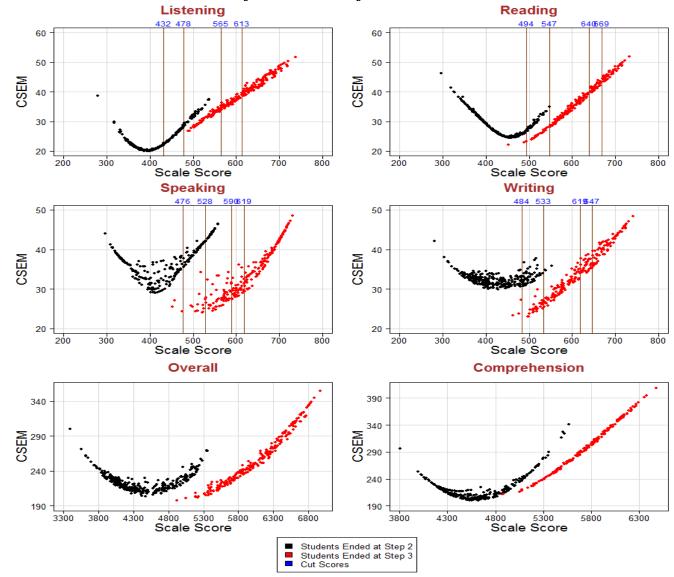


Figure S4.9: Screener Conditional Standard Error of Measurement for Grade 8

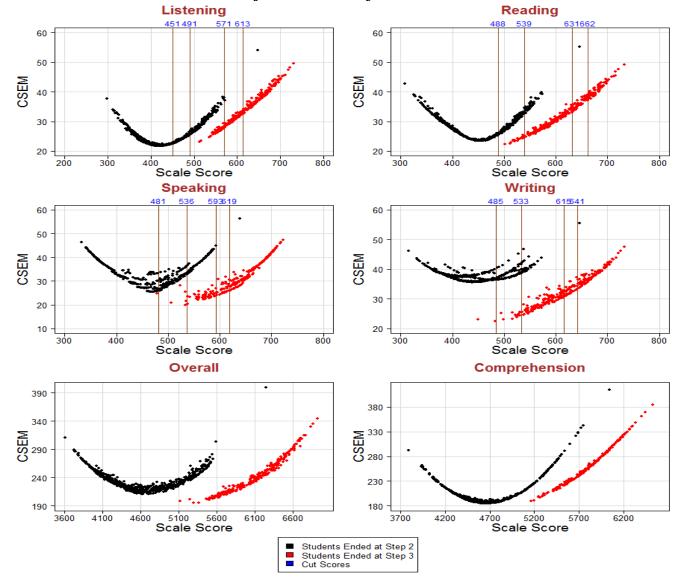


Figure S4.10: Screener Conditional Standard Error of Measurement for Grade 9

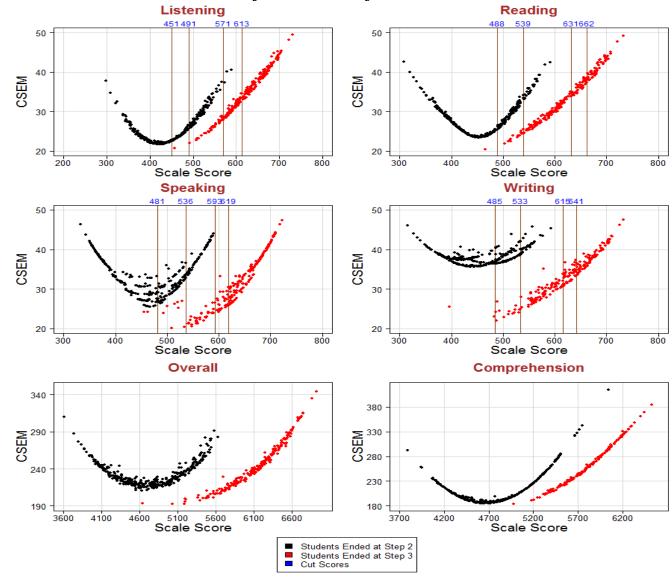


Figure S4.11: Screener Conditional Standard Error of Measurement for Grade 10

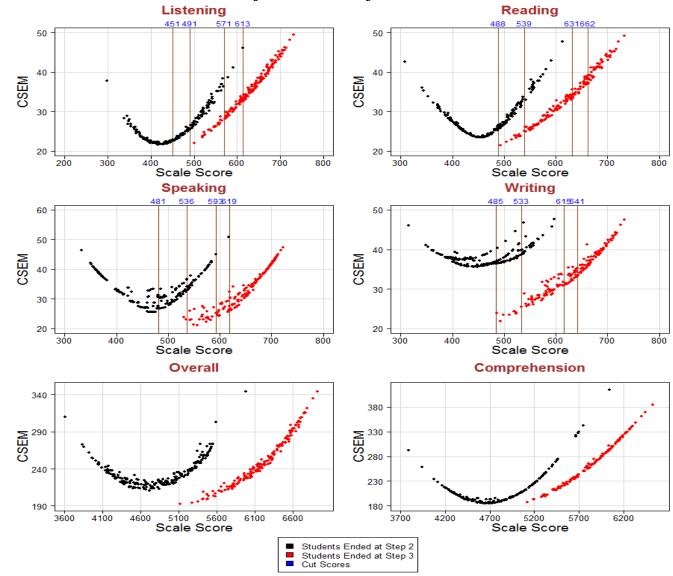


Figure S4.12: Screener Conditional Standard Error of Measurement for Grade 11

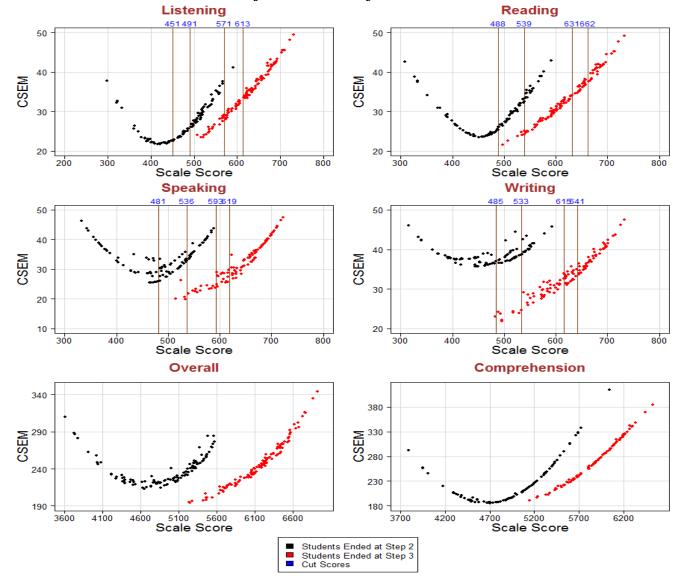


Figure S4.13: Screener Conditional Standard Error of Measurement for Grade 12

Section 5: Student Progress from Screener to Summative - Scatter Plots of Scale Score Change

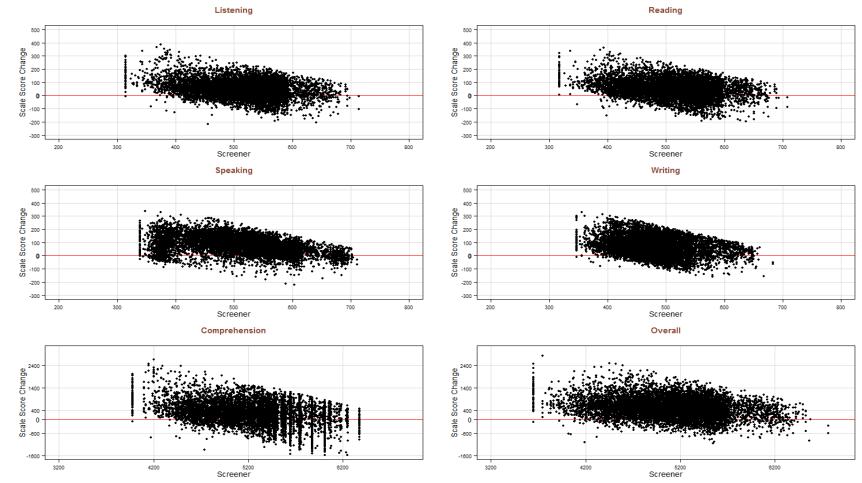


Figure S5.1: Scatter Plot of Scale Score Change from Screener to Summative for Grade K

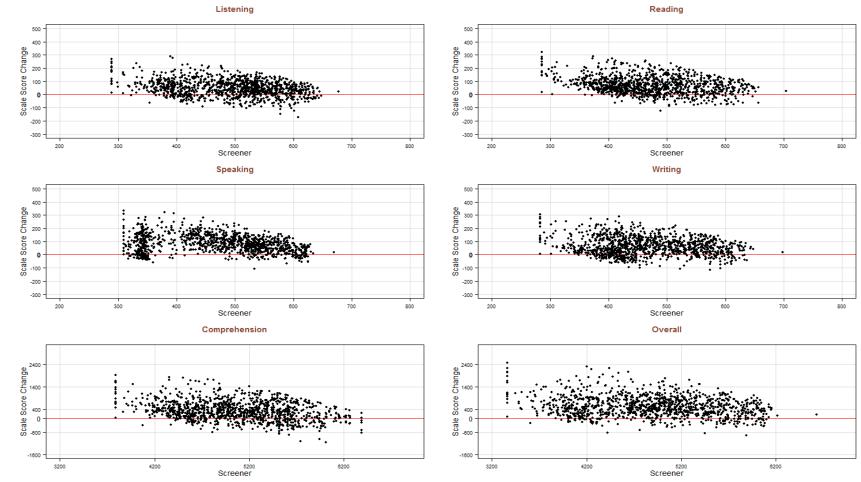


Figure S5.2: Scatter Plot of Scale Score Change from Screener to Summative for Grade 1

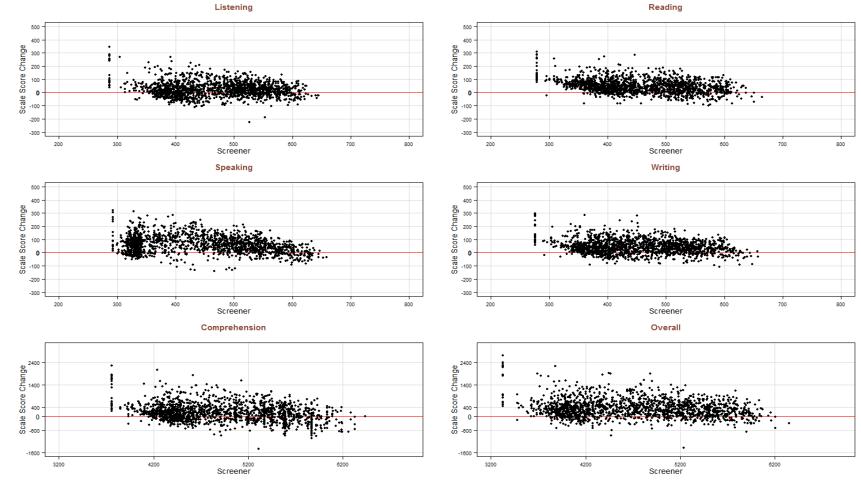


Figure S5.3: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 2-3

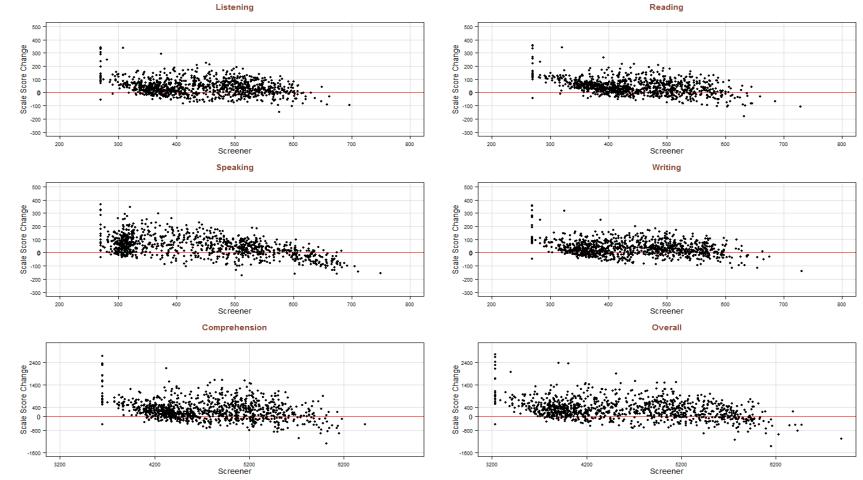


Figure S5.4: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 4-5

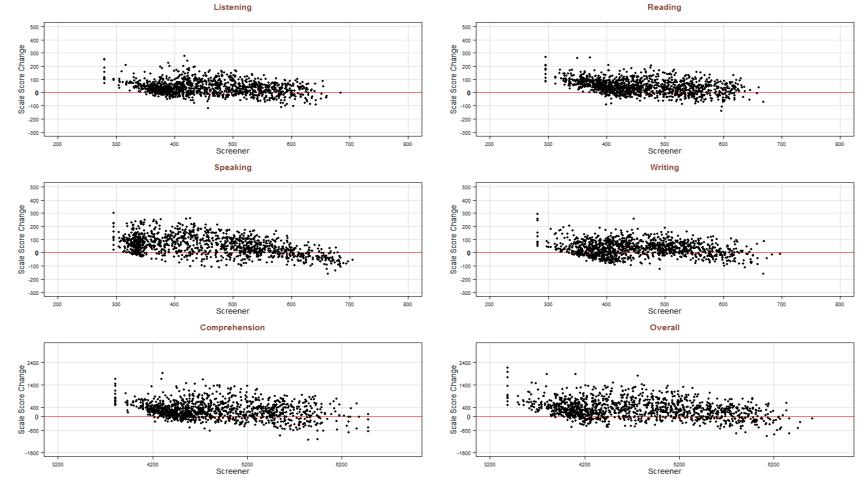


Figure S5.5: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 6-8

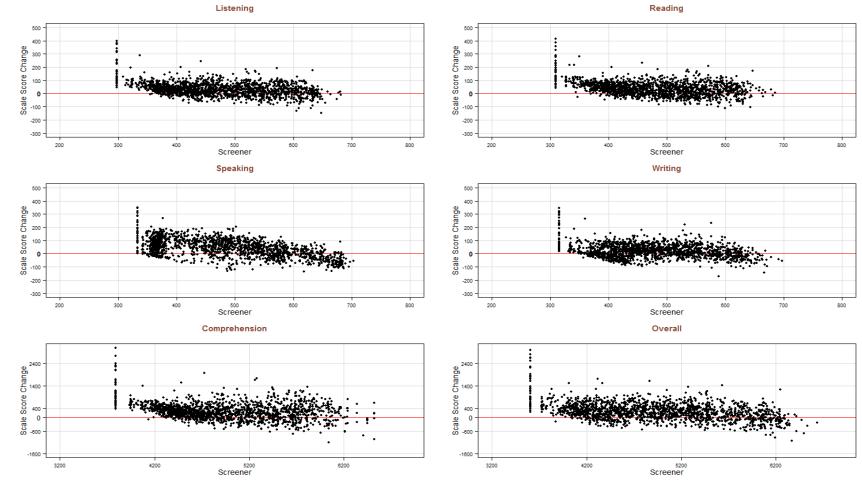


Figure S5.6: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 9-12

Section 6: Student Progress from Screener to Summative - Comparison of Scale Scores

Grade/Grade Band	Test	Ν	Mean	SD	Min	P10	P25	P50	P75	P90	Мах
К	Screener	8,558	519	62	314	430	483	531	561	583	714
n	Summative	8,558	566	77	237	466	512	565	619	666	775
4	Screener	1,140	491	82	288	381	422	505	552	596	678
1	Summative	1,140	538	87	289	412	472	547	604	648	712
2-3	Screener	1,588	468	77	286	374	402	468	531	573	645
2-3	Summative	1,588	490	90	279	367	408	499	565	603	719
4-5	Screener	1,036	441	87	270	337	369	432	513	559	696
4-5	Summative	1,036	480	92	213	363	397	480	556	604	700
6 9	Screener	1,254	453	83	279	362	386	431	521	575	684
6-8	Summative	1,254	488	88	335	384	406	480	558	612	742
0.12	Screener	1,619	472	88	297	366	401	462	543	599	681
9-12	Summative	1,619	506	86	343	403	432	497	572	629	809

 Table S6.1: Comparison of Scale Scores Between Screener and Summative - Listening

Grade/Grade Band	Test	N	Mean	SD	Min	P10	P25	P50	P75	P90	Max
к	Screener	8,488	516	61	318	429	478	524	558	584	708
ĸ	Summative	8,488	565	76	247	464	512	565	620	665	770
4	Screener	1,134	471	80	286	376	411	464	525	584	704
1	Summative	1,134	539	87	302	435	467	528	602	666	744
2-3	Screener	1,571	456	80	278	359	394	444	523	567	665
2-3	Summative	1,571	502	82	271	401	434	493	565	616	731
4-5	Screener	1,022	444	82	270	349	384	432	505	557	729
4-5	Summative	1,022	488	79	228	399	423	469	545	601	709
6-8	Screener	1,243	461	80	296	365	398	447	526	576	669
6-0	Summative	1,243	505	78	306	416	443	489	561	619	747
9-12	Screener	1,619	478	84	309	375	412	470	544	595	685
9-12	Summative	1,619	515	81	318	423	451	499	570	636	817

 Table S6.2: Comparison of Scale Scores Between Screener and Summative - Reading

Grade/Grade Band	Test	N	Mean	SD	Min	P10	P25	P50	P75	P90	Max
к	Screener	8,336	513	78	339	390	464	519	566	608	711
n	Summative	8,336	592	79	291	486	552	605	647	681	756
4	Screener	1,110	472	93	310	340	376	485	544	590	669
1	Summative	1,110	553	101	285	388	498	577	624	664	736
2-3	Screener	1,527	444	97	292	325	340	449	526	574	658
2-3	Summative	1,527	505	104	267	346	420	525	589	628	730
4-5	Screener	1,001	440	118	270	305	320	437	533	606	749
4-5	Summative	1,001	487	104	237	338	397	506	573	609	723
C 9	Screener	1,206	458	104	296	333	352	452	537	603	705
6-8	Summative	1,206	513	96	313	381	434	530	593	629	738
0.42	Screener	1,570	487	101	332	361	380	484	567	634	703
9-12	Summative	1,570	529	86	329	401	469	540	595	631	770

 Table S6.3: Comparison of Scale Scores Between Screener and Summative - Speaking

Grade/Grade Band	Test	Ν	Mean	SD	Min	P10	P25	P50	P75	P90	Max
IZ.	Screener	8,474	481	55	347	414	445	477	511	550	684
К	Summative	8,474	546	79	309	449	479	540	606	663	723
4	Screener	1,117	467	81	283	370	407	454	534	581	698
1	Summative	1,117	529	96	290	392	446	540	598	654	733
2-3	Screener	1,559	452	82	276	354	386	442	517	566	657
2-3	Summative	1,559	496	89	272	379	417	497	565	616	733
4-5	Screener	1,014	440	88	268	337	366	428	509	563	731
4-5	Summative	1,014	473	93	221	354	387	472	547	597	717
C 9	Screener	1,236	454	84	281	358	388	436	513	577	697
6-8	Summative	1,236	482	94	303	351	399	489	554	606	757
0.42	Screener	1,597	478	83	315	379	413	469	538	602	697
9-12	Summative	1,597	496	89	326	368	422	503	566	611	808

Table S6.4: Comparison of Scale Scores Between Screener and Summative - Writing

Grade/Grade Band	Test	N	Mean	SD	Min	P10	P25	P50	P75	P90	Max
К	Screener	8,588	5371	477	3978	4673	5053	5458	5744	5876	6375
n	Summative	8,588	5590	541	3377	4874	5208	5586	5978	6309	6865
4	Screener	1,147	5073	556	3785	4365	4637	5071	5501	5800	6387
1	Summative	1,147	5416	590	3759	4639	4972	5398	5832	6283	6633
2-3	Screener	1,593	4930	589	3756	4241	4428	4860	5433	5746	6439
2-3	Summative	1,593	5104	611	3598	4316	4566	5087	5592	5944	6729
4-5	Screener	1,042	4752	560	3649	4103	4305	4686	5200	5508	6421
4-5	Summative	1,042	5035	608	3298	4342	4525	4948	5508	5890	6878
6.9	Screener	1,263	4854	566	3803	4236	4407	4711	5299	5680	6476
6-8	Summative	1,263	5123	598	3986	4456	4621	5005	5559	6003	6938
0.42	Screener	1,636	4960	604	3787	4249	4476	4893	5447	5789	6524
9-12	Summative	1,636	5236	617	4051	4561	4740	5101	5628	6158	7177

Table S6.5: Comparison of Scale Scores Between Screener and Summative - Comprehension

Grade/Grade Band	Test	N	Mean	SD	Min	P10	P25	P50	P75	P90	Мах
к	Screener	8,613	5126	481	3646	4465	4831	5174	5452	5656	6763
ĸ	Summative	8,613	5635	566	3185	4917	5248	5635	6035	6362	7178
4	Screener	1,150	4880	665	3364	4006	4322	4913	5383	5796	6629
1	Summative	1,150	5418	722	3406	4374	4899	5467	5948	6369	6998
2-3	Screener	1,601	4713	670	3326	3903	4110	4700	5270	5624	6350
2-3	Summative	1,601	5073	719	3326	4079	4448	5137	5644	5987	6932
4-5	Screener	1,050	4619	748	3237	3748	3970	4517	5198	5677	6891
4-5	Summative	1,050	4951	720	2892	4025	4310	4957	5562	5909	6689
6-8	Screener	1,272	4753	700	3388	3948	4154	4649	5293	5763	6606
0-0	Summative	1,272	5081	696	3594	4178	4464	5078	5636	6019	6938
9-12	Screener	1,655	4938	709	3605	4061	4350	4894	5474	5991	6638
9 -12	Summative	1,655	5198	664	3696	4320	4658	5180	5716	6100	7483

 Table S6.6: Comparison of Scale Scores Between Screener and Summative - Overall